

ONTARIO SOIL BASELINE SURVEY

ANALYTICAL DATA 1980-1981

VOLUME 2

ANALYTICAL DATA FOR SOUTHERN ONTARIO

ARB-072-85-PHYTO

A.P.I.O.S. #002/85

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of the
Environment

The Honourable
Morley Kells
Minister

Dr. Allan E. Dyer
Deputy Minister

ONTARIO SOIL BASELINE SURVEY
- ANALYTICAL DATA 1980-1981 -

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VOLUME 2
ANALYTICAL DATA FOR SOUTHERN ONTARIO

TERRESTRIAL EFFECTS PROGRAM
ACIDIC PRECIPITATION IN ONTARIO STUDY

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T. Spires, Northern Terrestrial Consultants
P. Barclay, Lakehead University

ONTARIO MINISTRY OF THE ENVIRONMENT
NOVEMBER, 1984

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ACKNOWLEDGEMENTS

S.N. Linzon, Chairman of the A.P.I.O.S. Terrestrial Effects Working Group, originated the concept of the soil baseline program and has guided its development.

During 1980 and 1981, the collection of soil samples throughout Ontario involved a number of people. This work was accomplished under the co-ordination of M.A. Griffith (Southern Ontario), T. Spires (Northeastern Region) and W. Carswell (Northwestern Region). The development of an A.P.I.O.S. soils' laboratory and the chemical analyses of all soil samples were undertaken by the Laboratory Services Branch under the direction of A. Neary. The tables that form the bulk of Volumes 2 and 3 were typed by 2001 Word Processing Services .

- Volume 1 of this report was written by M. A. Griffith, A.P.I.O.S., Soil Specialist, Phytotoxicology Section, Air Resources Branch. T. Spires of Northern Terrestrial Consultants and P. Barclay, Lakehead University provided most of the information regarding Northeastern and Northwestern Ontario, respectively. All members of the Terrestrial Effects Working Group's Technical Subcommittee assisted in various editing stages of the report, principally D. Griffin, W. McIlveen, D. Dimma, A. Neary and T. Spires.

III SUMMARY

The soil baseline program began in 1980 and is part of the Ministry of Environment's Acidic Precipitation in Ontario Study (A.P.I.O.S.). The major objectives of the soil baseline program and methods used to sample soils are provided in Volume 1. In addition, the glacial history of Ontario, some theories of soil development, and the effect of acidic precipitation on soils are briefly outlined in Volume 1. Over 300 locations were sampled in 1980 and 1981 throughout the province. A reliable, current and uniform data base for soils across Ontario now exists and is presented in Volumes 2 (Analytical Data for Southern Ontario) and 3 (Analytical Data for Northern Ontario) of this report. This data base is being used by A.P.I.O.S. researchers to produce a map which will show the relative sensitivities of Ontario soils to acidic deposition. Resampling baseline soil profiles over an extended period will also provide a means of monitoring trends in soil chemistry due to environmental stress.

This report is mainly a presentation of field and laboratory soil information (Volumes 2 and 3). Each baseline site has been given a 6 digit location code number. Within each region, sites are presented in ascending order based on location code number. The numbers which appear on Maps 3 to 8 in Volume 1 correspond to the last 3 digits of the location code. Soil samples were analyzed at the Ministry's central laboratory in Toronto for pH, texture, extractable iron, aluminum and manganese, inorganic and organic carbon, major cations (NaCl exchangeable), CEC (sum of cations measured), anions, and trace metals (HNO_3 - HClO_4 extractable). Further description of the analytical methods can be found in Volume 1 and in the "Procedures Manual Terrestrial Effects, Acid Precipitation in Ontario Study" (A.P.I.O.S.) Report No. 007/83 Ontario Ministry of the Environment. Data are reported to two significant figures. For the 14000, 17000 and 18000 series samples, organic carbon values were rounded to the nearest percent. This has since changed to provide better data at low levels.

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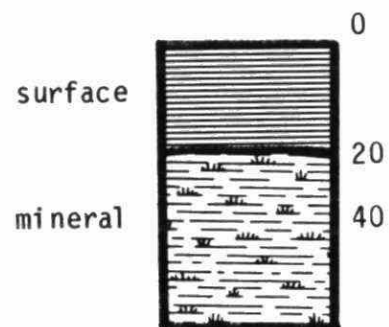
SW - Southwestern Region
 WC - West-Central Region
 C - Central
 SE - Southeastern Region

SOIL BASELINE ANALYTICAL DATA, 1980-1981

SOUTHWESTERN REGION

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Maidstone Conservation Area Date: 80/06/03



Location Code: 1001014

UTM: 17T 352350 4674700

Landform: clay plain/till plain

Slope: level

Vegetation: red oak, ash, white oak, red maple

Comments: mottled at depth (7.5YR 5/6),
water seeping in at 40 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9091	surface	0-20	5YR 3/1	24	28	48	6.9	6.4	3.4	2.9	14			670	
9093	surface	0-20	5YR 3/1	24	30	46	6.9	6.3	3.7	3.8	14			920	
9090	mineral	20-40	2.5YR 6/0	21	29	50	7.4	7.1	0.90	1.1	15			260	
9092	mineral	20-40	2.5YR 6/0	19	30	51	7.6	7.1	0.90	1.3	12			350	

SOIL PROFILE INFORMATION (cont'd.)

Site: Maidstone Conservation Area

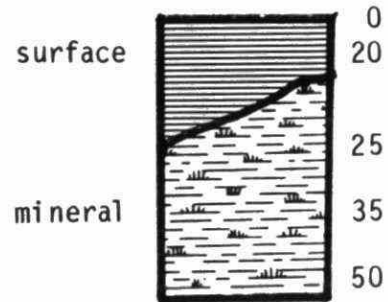
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9091	surface	3500	520	95		22	0.16	0.080	0.0026	0.93	0.082	0.012	<1.0	100	49	33	17
9093	surface	3500	510	140		22	0.16	0.10	0.0030	0.93	0.10	0.013	<1.0	110	42	35	20
9090	mineral	1800	400	120		13	0.090	0.050	0.0021	1.2	0.090	0.015	1.0	98	46	34	11
9092	mineral	2800	570	95		19	0.11	0.070	0.0020	1.3	0.090	0.019	1.0	100	39	36	12

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Canard River Conservation Area

Date: 80/06/04



Location Code: 1001016

UTM: 17T 342850 4666550

Vegetation: sumac, hawthorn

Landform: clay plain/till plain

Comments: mottles at 30 cm (5YR 5/6)

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9104	surface	0-25	2.5YR 3/2	28	33	39	7.9	7.4	3.3	2.6	18			500	
9103	mineral	25-35	10YR 5/1	15	26	58	7.1	6.5	0.65	0.76	16			200	
9102	mineral	50+	10YR 5/1	19	25	56	7.1	6.7	0.57	0.73	21			270	
9107	surface	0-20	2.5YR 3/2	31	30	39	7.8	7.3	3.5	2.7	21			440	
9106	mineral	25-35	10YR 5/1	26	24	50	7.1	6.6	0.90	1.1	20			240	
9105	mineral	35-50	10YR 5/1	21	23	57	7.2	6.6	0.57	0.87	25			310	

SOIL PROFILE INFORMATION (cont'd.)

Site: Canard River Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9104	surface	3100	1100	170		25	0.12	0.050	0.0069	1.5	0.13	0.051	5.0	86	27	22	24
9103	mineral	2300	270	120		14	0.18	0.080	0.0090	1.7	0.20	0.11	<1.0	91	28	35	13
9102	mineral	1900	680	95		15	0.13	0.040	0.0040	1.7	0.19	0.029	<1.0	83	39	43	12
9107	surface	3300	270	200		19	0.080	0.030	0.0050	1.3	0.12	0.051	2.0	74	24	19	25
9106	mineral	1900	330	74		12	0.14	0.050	0.0037	1.4	0.18	0.023	<1.0	79	36	31	14
9105	mineral	1700	33	95		9.2	0.15	0.060	0.0015	1.5	0.16	0.025	<1.0	84	32	43	13

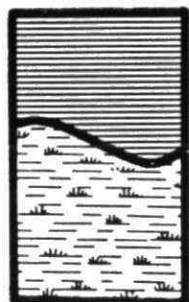
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Devonwood Conservation Area

Date: 80/06/04

surface



0

20

35

50

Location Code: 1001017

UTM: 17T 336700 4680600

Landform: Clay plain

Slope: level

Vegetation: poison ivy, grass, maple, oak

Comments: mottles in pit, (7.5YR 5/6), water at 35 cm, beside Windsor Airport

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9108	surface	0-20	10YR 3/2	33	33	33	8.1	7.6	2.5	2.1	21			410	
9109	surface	20-35	10YR 3/2	36	27	37	7.9	7.4	2.8	2.5	33			580	
9110	mineral	35-50	2.5YR 6/2	34	26	40	7.7	7.3	0.84	0.91	42			240	
9112	surface	0-20	10YR 3/2	16	37	47	7.8	7.3	3.6	3.7	27			1020	
9111	surface	20-35	10YR 3/2	37	25	37	7.6	6.2	3.3	2.8	43			620	

SOIL PROFILE INFORMATION (cont'd.)

Site: Devonwood Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9108	surface	2400	380	180		16	0.070	0.040	0.0065	0.94	0.090	0.022	14	70	34	23	18
9109	surface	3000	600	110		20	0.10	0.10	0.0016	0.70	0.11	0.0040	2.0	76	30	22	14
9110	mineral	1700	370	80		12	0.060	0.040	0.0029	1.1	0.11	0.022	2.0	75	31	27	12
9112	surface	3100	540	270		21	0.090	0.050	0.0041	0.75	0.11	0.010	2.0	87	38	23	21
9111	surface	3200	640	110		21	0.11	0.090	0.00090	0.71	0.11	0.0040	1.0	64	30	20	15

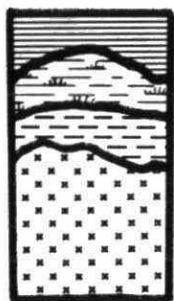
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Lorne C. Henderson Conservation Area

Date: 80/06/05

surface 0
mineral 20
mineral 30
mineral 40
mineral 55



Location Code: 1001019

UTM: 17T 403000 4747900

Vegetation: hawthorn, grass

Landform: clay plain/till plain

Comments: mottles at 30 cm (10YR 5/6),
earthworms in top 30 cm

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9138	surface	0-20	10YR 4/2	12	48	40	6.9	6.4	2.9	2.2	12			340	
9139	surface	0-20	10YR 4/2	12	46	42	7.2	6.5	3.0	2.4	14			490	
9136	mineral	22-30	10YR 4/1	5.0	41	54	7.3	6.8	0.87	1.2	9.8			320	
9137	mineral	22-30	10YR 4/1	3.0	31	66	7.3	7.0	0.68	0.80	10			290	
9134	mineral	30-40	10YR 5/3	3.0	31	66	7.7	7.3	0.70	0.90	17			610	
9135	mineral	30-40	10YR 5/3	2.0	27	71	7.7	7.4	0.68	0.85	15			480	
9132	mineral	40-55	10YR 6/3	4.0	32	64	8.3	7.9	0.53	0.64	23			580	
9133	mineral	40-55	10YR 6/3	2.0	32	66	8.3	7.8	0.44	0.66	25			600	

SOIL PROFILE INFORMATION (cont'd.)

Site: Lorne C. Henderson Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9138	surface	3000	680	85		20	0.11	0.060	0.0099	1.2	0.18	0.074	<1.0	79	34	27	18
9139	surface	3300	730	110		23	0.10	0.060	0.0089	1.2	0.17	0.074	<1.0	82	36	28	19
9136	mineral	2400	1000	85		21	0.090	0.010	0.0034	1.4	0.21	0.053	<1.0	89	57	46	12
9137	mineral	2600	1100	85		22	0.090	0.010	0.0024	1.4	0.21	0.045	1.0	81	44	44	11
9134	mineral	2500	1300	96		23	0.060	0.010	0.0024	1.4	0.21	0.043	2.0	93	61	56	11
9135	mineral	2600	1300	85		24	0.070	0.010	0.0031	1.4	0.22	0.043	2.0	110	88	63	12
9132	mineral	2200	1000	74		20	0.020	<0.0020	0.0021	1.1	0.15	0.044	12	85	59	51	10
9133	mineral	2400	1100	110		21	0.010	<0.0020	0.0026	1.2	0.16	0.040	13	86	70	52	11

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Pinery Provincial Park

Date: 80/06/05

surface

mineral

mineral



Location Code: 1001035

Parent Material: aeolian sand

UTM: 17T 429100 4787100

Vegetation: oak, pine, grass, ferns

Landform: sand plain/beach

Comments: inland sand dunes

Slope: very gentle slopes

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9146	surface	0-15	5YR 3/1	91	2.0	7.0	7.9	7.6	1.1	0.73	3.5			260	
9147	surface	0-15	5YR 3/1	90	3.0	6.0	8.1	7.4	1.1	1.0	3.7			310	
9144	mineral	15-25	10YR 4/3	88	2.0	10	8.2	7.8	0.47	0.44	3.1			250	
9145	mineral	15-25	10YR 4/3	91	1.0	8.0	8.0	7.7	0.47	0.36	2.5			240	
9142	mineral	25-60	2.5YR 6/2	91	1.0	8.0	8.3	7.7	0.090	0.23	0.60			140	
9143	mineral	25-60	2.5YR 6/2	91	1.0	7.0	8.2	7.8	0.070	0.18	1.9			210	
9140	mineral	60-80	2.5YR 6/2	90	2.0	8.0	8.2	7.7	0.090	0.13	1.0			130	
9141	mineral	60-80	2.5YR 6/2	91	2.0	7.0	8.2	7.6	0.050	0.15	0.80			150	

SOIL PROFILE INFORMATION (cont'd.)

Site: Pinery Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9146	surface	2100	150	32		12	0.010	0.010	0.0052	0.15	0.020	0.0090	13	19	15	3.0	5.5
9147	surface	1800	123	32		10	0.010	<0.0020	0.0042	0.15	0.020	0.0090	11	19	19	3.0	6.1
9144	mineral	730	43	11		4.0	0.010	0.020	0.00070	0.14	0.020	0.0050	22	6.7	20	3.4	<3.0
9145	mineral	660	28	11		4.0	0.010	0.020	0.0013	0.13	0.020	0.0050	21	7.7	23	3.0	<3.0
9142	mineral	300	11	5.2		1.6	0.010	<0.0020	0.00070	0.10	0.020	0.0040	18	4.8	17	2.9	<3.0
9143	mineral	300	8.5	5.2		1.7	0.010	<0.0020	0.0010	0.10	0.010	0.0040	17	5.8	23	3.0	<3.0
9140	mineral	200	8.5	5.2		1.2	0.010	0.010	0.0014	0.14	0.030	0.0050	17	10	33	5.1	<3.0
9141	mineral	200	8.5	5.2		1.2	0.010	<0.0020	0.00060	0.10	0.020	0.0040	20	9.3	32	3.4	<3.0

SOIL PROFILE INFORMATION

Horizon

Depth(cm)

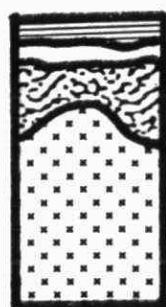
Site: MacGregor Point Provincial Park

Date: 80/07/02

surface

mineral

mineral



0
10
13
20
45
50
60
80

Location Code: 1001044

UTM: 17T 464100 4917900

Landform: sand plain/beach shoreline

Slope: nearly level

Vegetation: oak, maple

Comments: rocks at 45-80 cm,
no clay skins

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9352	surface	0-10	5YR 2.5/1	82	2.0	16	6.6	5.8	4.1	0.66	12			50	
9353	surface	0-10	5YR 2.5/1	88	4.0	7.0	6.1	5.4	4.3	0.94	9.0			80	
9351	mineral	10-13	7.5YR 7/2	93	3.0	4.0	6.3	5.2	0.93	0.79	4.0			30	
9349	mineral	13-20	5YR 4/4	86	3.0	11	7.6	6.9	1.5	0.31	4.7			120	
9350	mineral	13-20	5YR 4/4	88	4.0	8.0	7.0	6.1	1.2	0.32	4.5			170	
9347	mineral	20-30	7.5YR 4/4	87	3.0	10	7.8	7.6	0.72	0.27	3.1			190	
9348	mineral	20-30	7.5YR 4/4	88	2.0	10	8.1	7.4	0.73	0.27	3.3			160	
9345	mineral	45-50	10YR 5/4	89	4.0	7.0	7.9	7.5	0.33	0.19	1.4			150	
9346	mineral	45-50	10YR 5/4	86	3.0	10	8.0	7.4	0.31	0.13	2.0			150	
9343	mineral	60-80	10YR 6/4	84	6.0	10	7.8	7.5	0.31	0.13	2.3			240	
9344	mineral	60-80	10YR 6/4	76	5.0	18	8.6	7.7	0.25	0.13	1.8			160	12

SOIL PROFILE INFORMATION (cont'd.)

Site: MacGregor Point Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9352	surface	1200	230	77		7.7	0.070	0.030	0.0044	0.25	0.074	0.0050	<1.0	37	5.8	30	8.6
9353	surface	1100	200	61	6.0	8.0	0.070	0.030	0.0035	0.27	0.081	0.0050	<1.0	32	6.8	44	10
9351	mineral	470	86	18	<4.5	3.1	0.070	0.030	0.0015	0.28	0.060	0.0030	<1.0	19	9.5	55	<3.0
9349	mineral	960	250	28		6.8	0.12	0.10	0.0086	0.49	0.23	0.020	<1.0	17	5.9	49	<3.0
9350	mineral	760	130	25		4.9	0.11	0.10	0.0045	0.44	0.26	0.014	<1.0	20	5.7	45	<3.0
9347	mineral	600	140	22		4.1	0.050	0.030	0.0048	0.25	0.045	0.010	25	9.0	3.7	34	3.1
9348	mineral	540	110	19		3.6	0.050	0.030	0.0061	0.27	0.040	0.014	23	8.7	4.4	34	<3.0
9345	mineral	270	53	19		1.8	0.030	0.010	0.0030	0.24	0.020	0.0080	30	8.6	3.5	47	<3.0
9346	mineral	290	67	19		2.0	0.040	0.010	0.0053	0.24	0.020	0.0090	27	8.6	4.8	70	<3.0
9343	mineral	240	38	23		1.5	0.020	0.010	0.0029	0.26	0.010	0.0080	29	9.4	3.5	35	<3.0
9344	mineral	270	38	23		1.7	0.030	0.010	0.0043	0.29	0.020	0.012	28	9.2	3.6	43	<3.0

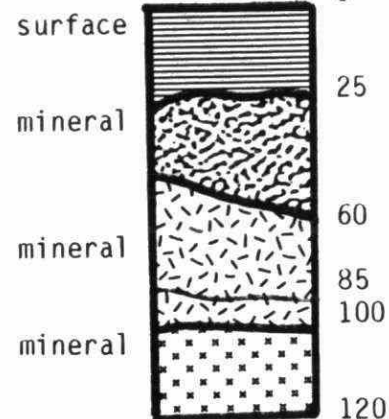
SOIL PROFILE INFORMATION

Horizon Depth(cm)

Site: Pottawatomi and Jones Falls
Conservation Area

Date: 80/07/03

Location Code: 1001046



UTM: 17T 502200 4934300

Vegetation: grass

Landform: shale plain/clay plain

Comments: on river bank

Slope: gently sloping

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9372	surface	0-25	10YR2.5/1	55	20	25	7.0	6.3	2.7	0.86	7.0			280	
9373	surface	0-25	10YR2.5/1	57	17	26	7.0	6.4	2.5	1.6	7.0			630	
9370	mineral	25-60	10YR 4/4	69	13	18	7.2	6.4	0.77	0.44	4.2			380	
9371	mineral	25-60	10YR 4/4	68	14	18	7.0	6.4	0.92	0.76	4.0			600	
9368	mineral	60-85	10YR 5/6	69	14	17	7.3	6.5	1.2	0.67	3.5			350	
9369	mineral	60-85	10YR 5/6	76	10	14	7.3	6.4	0.81	0.43	2.6			310	
9366	mineral	85-100	5YR 4/3	60	19	21	8.0	7.0	1.0	1.0	3.7			680	
9367	mineral	85-100	5YR 4/3	68	13	20	7.5	6.8	0.97	0.72	3.6			690	
9364	mineral	100-120	2.5YR 5/2	8.0	53	39	8.3	7.7	0.48	2.2	6.6			570	14
9365	mineral	100-120	2.5YR 5/2	6.0	56	38	8.5	7.8	0.39	0.35	8.1			440	

SOIL PROFILE INFORMATION (cont'd.)

Site: Pottawatomi and Jones Falls Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9372	surface	2400	290	51		14	0.090	0.070	0.028	1.4	0.16	0.12	<1.0	42	24	20	5.2
9373	surface	2300	270	45		14	0.10	0.080	0.030	1.6	0.18	0.15	<1.0	48	23	32	5.1
9370	mineral	1000	190	23		6.8	0.11	0.040	0.0070	2.3	0.15	0.21	<1.0	30	22	36	3.1
9371	mineral	1200	220	23		7.9	0.15	0.050	0.019	2.1	0.13	0.21	<1.0	39	32	28	6.4
9368	mineral	1300	220	17		8.1	0.21	0.080	0.011	1.2	0.14	0.048	1.0	31	37	17	4.7
9369	mineral	880	160	14		5.7	0.15	0.050	0.0084	1.3	0.12	0.071	1.0	27	18	32	<3.0
9366	mineral	1400	240	23		8.8	0.17	0.070	0.013	2.3	0.16	0.18	7.0	39	32	25	11
9367	mineral	1200	270	25		7.9	0.15	0.060	0.015	2.0	0.13	0.18	2.0	37	32	21	6.8
9364	mineral	1800	240	54		11	0.020	0.010	0.0029	1.4	0.10	0.067	8.0	54	34	35	3.2
9365	mineral	1600	240	54		9.9	0.010	0.010	0.0024	1.4	0.090	0.047	20	55	40	33	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Bruce's Caves Conservation Area

Date: 81/07/03

surface 0

Location Code: 1001048

UTM: 17T 493850 4957600

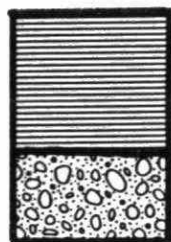
Vegetation: shrubs

Landform: limestone outcrops

Comments: depth to bedrock 10 cm

Slope: level

rock



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9380	surface	0-10	10YR2.5/1	9.0	39	52	7.7	7.2	11	4.8	23			1100	
9381	surface	0-10	10YR2.5/1	18	34	48	7.5	7.1	11	5.2	21			1000	

SOIL PROFILE INFORMATION (cont'd.)

Site: Bruce's Caves Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9380	surface	5200	1100	120		35	0.24	0.24	0.11	2.2	0.32	0.20	6.0	120	39	12	46
9381	surface	5600	1100	120		37	0.30	0.26	0.14	2.3	0.38	0.21	6.0	120	41	11	44

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Sauble Falls Provincial Park

Date: 80/07/03

surface 0

Location Code: 1001049

UTM: 17T 479800 4946550

Vegetation: maple, pine, ferns

mineral 40

Landform: sand plain/sand dunes

Comments:

mineral 70

Slope: nearly level

100



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9388	surface	0-20	10YR 3/3	91	<1.0	9.0	7.9	7.1	1.3	0.48	4.0			290	
9389	surface	0-20	10YR 3/3	88	<1.0	12	7.8	7.0	1.2	0.47	5.3			200	
9386	mineral	20-40	7.5YR 5/6	97	<1.0	4.0	7.7	7.0	0.64	0.17	2.1			150	
9387	mineral	20-40	7.5YR 5/6	95	<1.0	5.0	7.8	7.0	0.67	0.31	2.1			410	
9384	mineral	40-70	10YR 6/6	91	<1.0	8.0	8.4	7.8	0.16	<0.13	5.2			100	
9385	mineral	40-70	10YR 6/6	90	6.0	4.0	8.4	7.8	0.16	<0.13	2.6			160	
9382	mineral	70-100	10YR 6/4	91	<1.0	9.0	8.4	7.8		<0.14	4.9			140	
9383	mineral	70-100	10YR 6/4	90	<1.0	9.0	8.8	7.8	0.090	<0.12	0.50			90	

SOIL PROFILE INFORMATION (cont'd.)

Site: Sauble Falls Provincial Park

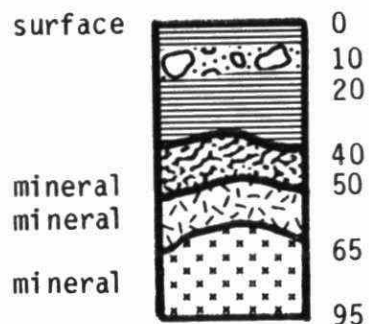
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9388	surface	750	130	3.0		4.8	0.030	0.040	0.0094	0.37	0.090	0.024	<1.0	19	4.4	47	<3.0
9389	surface	820	140	6.0		5.3	0.030	0.030	0.0095	0.36	0.080	0.024	<1.0	19	3.1	24	4.1
9386	mineral	360	76	6.0		2.4	0.040	0.080	0.0048	0.28	0.12	0.014	2.0	13	15	64	<3.0
9387	mineral	470	66	3.0		2.9	0.050	0.080	0.0058	0.33	0.13	0.020	1.0	11	3.2	68	<3.0
9384	mineral	240	33	3.0		1.5	0.010	0.010	0.0048	0.19	0.020	0.013	33	7.1	3.2	51	<3.0
9385	mineral	240	23	3.0		1.4	0.020	0.010	0.0050	0.19	0.030	0.013	34	8.8	8.3	49	<3.0
9382	mineral	190	19	6.0		1.1	0.020	0.010	0.0041	0.20	0.021	0.011	36	7.2	4.2	56	<3.0
9383	mineral	170	14	3.0		0.94	0.010	<0.0029	0.0025	0.19	0.012	0.0060	39	6.1	3.3	53	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Chesney Conservation Area

Date: 80/07/08



Location Code: 1001050

UTM: 17T 536500 4785650

Vegetation: grasses, clover, maple

Landform: kame moraine

Comments: stone layer at 10-20 cm not sampled, indicates possible disturbance 65-95 very stoney

Slope: moderate slopes

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9398	surface	0-10	10YR 3/3	62	17	20	7.7	7.1	2.3	1.3	7.9			300	
9399	surface	0-10	10YR 3/3	61	18	21	7.7	7.1	2.1	2.0	8.6			430	
9396	surface	20-40	10YR 4/4	58	25	17	7.8	7.4	1.3	0.56	6.5			220	
9397	surface	20-40	10YR 4/4	53	28	19	7.9	7.4	1.4	0.88	5.9			270	
9394	mineral	40-50	10YR 6/4	65	25	10	7.9	7.3	0.56	0.23	5.6			110	
9395	mineral	40-50	10YR 6/4	66	25	9.0	7.8	7.3	0.52	0.27	5.7			110	
9392	mineral	50-65	10YR 5/4	65	24	11	7.8	7.3	0.13	<0.11	4.2			140	
9393	mineral	50-65	10YR 5/4	66	24	10	7.8	7.3	0.27	0.22	4.7			130	
9390	mineral	65-95	5YR 4/6	59	12	28	8.0	7.5	0.40	0.33	5.9			380	
9391	mineral	65-95	5YR 4/6	72	10	18	8.3	7.7	0.36	0.22	7.7			420	20

SOIL PROFILE INFORMATION (cont'd.)

Site: Chesney Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9398	surface	1600	290	120		10	0.070	0.040	0.016	0.76	0.10	0.023	1.0	53	18	9.8	12
9399	surface	1600	310	120		11	0.060	0.040	0.017	0.74	0.10	0.024	1.0	54	18	9.3	13
9396	surface	1400	170	22		8.0	0.090	0.050	0.010	0.78	0.11	0.025	2.0	46	22	9.2	6.9
9397	surface	1500	210	28		9.2	0.080	0.050	0.013	0.74	0.10	0.024	2.0	49	17	9.5	9.3
9394	mineral	660	71	11		3.9	0.10	0.070	0.0021	0.60	0.10	0.008	1.0	33	17	7.8	5.2
9395	mineral	640	76	11		3.8	0.12	0.080	0.0016	0.70	0.11	0.006	1.0	35	16	7.9	5.0
9392	mineral	530	76	8.0		3.2	0.040	0.020	0.0021	0.57	0.060	0.015	2.0	27	15	7.1	3.4
9393	mineral	530	66	11		3.2	0.050	0.030	0.0030	0.52	0.060	0.014	2.0	28	14	7.5	4.1
9390	mineral	1600	300	20		11	0.030	0.020	0.0028	1.6	0.20	0.043	4.0	61	25	16	10
9391	mineral	1400	240	17		9.0	0.050	0.030	0.0034	1.4	0.16	0.041	8.0	61	29	16	9.7

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Pittock Conservation Area

Date: 80/07/08

surface 0

Location Code: 1001051

mineral 20

UTM: 17T 520000 4778000

Vegetation: maple, oak

mineral 40

Landform: till plain

Comments: large boulder at 45-50 cm
organic mottles at 20-35 cm
hematitic rock at 40 cm

mineral 50

Slope: level



Rock
60

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9408	surface	0-18	5YR 2.5/2	57	18	25	7.6	7.0	3.7	2.6	13			620	
9409	surface	0-18	5YR 2.5/2	54	25	21	7.5	7.0	3.5	2.5	13			710	
9406	mineral	20-35	7.5YR 4/4	67	21	11	7.6	6.8	0.78	0.58	3.7			370	
9407	mineral	20-35	7.5YR 4/4	67	22	11	7.5	6.7	0.88	0.47	3.5			270	
9404	mineral	35-40	7.5YR 4/4	69	23	7.0	7.6	6.8	0.36	0.22	2.5			240	
9405	mineral	35-40	7.5YR 4/4	70	21	9.0	7.5	6.7	0.61	0.31	3.6			250	
9402	mineral	45-50	5YR 3/4	51	16	33	7.7	7.0	0.48	0.34	4.3			360	
9403	mineral	45-50	5YR 3/4	46	27	28	7.9	7.2	0.52	0.34	5.2			440	
9400	mineral	50-60	10YR 4/3	57	29	14	7.7	6.7	0.12	<0.14	1.8			320	
9401	mineral	50-60	10YR 4/3	56	26	17	7.5	6.7	0.20	<0.12	3.1			240	

SOIL PROFILE INFORMATION (cont'd.)

Site: Pittock Conservation Area

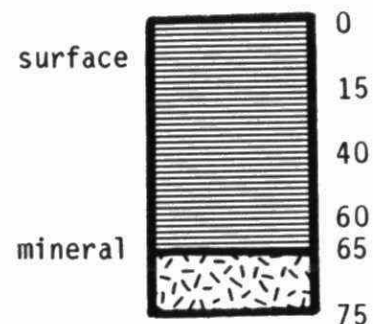
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9408	surface	2500	350	62		16	0.13	0.060	0.061	0.56	0.10	0.081	<1.0	60	21	8.0	20
9409	surface	2600	360	56		16	0.13	0.070	0.070	0.50	0.090	0.076	<1.0	57	13	6.3	20
9406	mineral	840	130	14		5.2	0.16	0.090	0.0080	0.61	0.15	0.032	<1.0	49	18	8.2	5.0
9407	mineral	880	130	17		5.4	0.23	0.12	0.014	0.62	0.15	0.091	<1.0	50	16	6.9	5.0
9404	mineral	550	96	14		3.5	0.060	0.040	0.0034	0.44	0.090	0.024	<1.0	37	13	8.3	5.4
9405	mineral	660	110	14		4.2	0.13	0.090	0.0080	0.45	0.10	0.025	<1.0	40	11	8.1	4.8
9402	mineral	1100	270	17		7.4	0.12	0.070	0.0099	0.96	0.13	0.054	1.0	56	21	16	8.9
9403	mineral	1500	380	23		10	0.13	0.070	0.012	1.1	0.14	0.058	1.0	72	39	18	11
9400	mineral	560	150	18		4.0	0.080	0.040	0.0040	0.67	0.080	0.047	<1.0	40	15	12	9.6
9401	mineral	780	190	14		5.4	0.060	0.030	0.0029	0.71	0.080	0.043	<1.0	37	17	11	6.9

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Wildwood Conservation Area

Date: 80/07/08



Location Code: 1001052

UTM: 17T 494900 4790450

Vegetation: pine

Landform: fluvial deposit

Comments: depth to watertable 75 cm,
in flood plain

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9416	surface	0-15	10YR2.5/1	21	49	30	7.6	7.1	3.4	2.1	12			670	
9417	surface	0-15	10YR2.5/1	30	39	31	7.4	7.0	4.2	2.0	14			590	
9414	surface	15-40	10YR2.5/1	24	48	27	7.9	7.6	2.2	1.2	9.9			450	
9415	surface	15-40	10YR2.5/1	22	51	27	8.0	7.6	2.4	1.2	13			470	
9412	surface	40-65	10YR2.5/1	12	53	35	8.1	7.6	3.5	2.6	17			1100	
9413	surface	40-65	10YR2.5/1	12	47	41	8.0	7.5	3.9	3.4	16			1500	
9410	mineral	65-75	10YR 5/4	9.0	60	30	7.9	7.5	0.57	0.61	8.0			680	
9411	mineral	65-75	10YR 5/4	9.0	58	33	8.0	7.5	0.64	0.52	10			620	

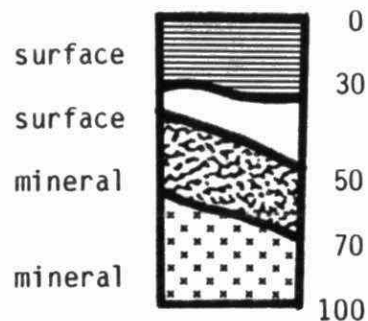
SOIL PROFILE INFORMATION (cont'd.)

Site: Wildwood Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9416	surface	3200	200	45		19	0.10	0.060	0.029	0.96	0.13	0.077	<1.0	77	26	19	22
9417	surface	3400	340	51		20	0.090	0.060	0.039	0.99	0.13	0.079	<1.0	77	19	18	24
9414	surface	3000	220	40		17	0.080	0.070	0.016	0.95	0.14	0.082	2.0	66	23	18	12
9415	surface	3100	230	34		18	0.080	0.060	0.022	1.0	0.14	0.092	3.0	66	23	18	13
9412	surface	4800	290	34		27	0.12	0.17	0.015	0.99	0.17	0.070	1.0	84	51	20	11
9413	surface	4800	310	40		27	0.12	0.20	0.017	0.95	0.16	0.067	3.0	83	44	19	13
9410	mineral	2400	200	45		14	0.070	0.040	0.0029	1.1	0.15	0.086	1.0	79	34	25	11
9411	mineral	2400	210	48		14	0.060	0.040	0.0038	1.1	0.16	0.097	1.0	80	36	25	11

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Fanshawe Conservation Area Date: 80/07/08



Location Code: 1001053

UTM: 17T 486500 4766750

Landform: spillway

Slope: moderate slope

Vegetation: grasses, clover

Comments: bleached horizon at 40 cm.
organic contamination when
sampling bleached horizon

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9426	surface	0-30	5YR 3/1	24	48	28	8.1	7.6	4.0	2.1	13			250	
9427	surface	0-30	5YR 3/1	23	46	30	8.1	7.6	2.4	1.9	14			470	
9424	surface	30-50	5YR 5/1	25	49	26	8.0	7.5	2.5	1.6	12			530	
9425	surface	30-50	5YR 5/1	24	52	24	7.9	7.4	2.9	1.1	11			210	
9422	mineral	50-70	10YR 6/4	28	49	23	7.9	7.3	0.84	0.50	5.1			300	
9423	mineral	50-70	10YR 6/4	30	48	22	7.9	7.3	0.80	0.47	4.3			250	
9420	mineral	70-85	7.5YR 4/4	35	35	30	8.0	7.5	0.43	0.45	3.0			600	
9421	mineral	70-85	7.5YR 4/4	32	38	30	7.9	7.4	0.47	0.42	4.8			560	
9418	mineral	85-100	10YR 4/3	29	37	34	8.4	7.8	0.45	0.32	3.0			480	
9419	mineral	85-100	10YR 4/3	29	38	33	8.3	7.8	0.31	0.35	4.0			130	

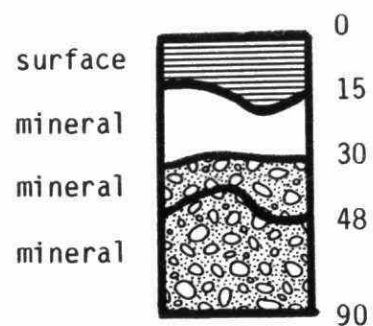
SOIL PROFILE INFORMATION (cont'd.)

Site: Fanshawe Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9426	surface	3300	160	170		18	0.10	0.050	0.027	0.94	0.13	0.071	5.0	89	41	17	38
9427	surface	2900	150	220		16	0.080	0.040	0.023	0.89	0.12	0.065	6.0	85	27	16	38
9424	surface	2800	120	34		15	0.10	0.070	0.018	0.80	0.12	0.078	3.0	67	19	14	15
9425	surface	2600	110	34		14	0.11	0.070	0.015	0.85	0.13	0.075	2.0	70	22	14	15
9422	mineral	1600	110	20		9.0	0.11	0.060	0.0082	0.84	0.12	0.056	2.0	60	16	15	12
9423	mineral	1700	110	17		9.2	0.12	0.060	0.0079	0.85	0.12	0.055	2.0	63	22	18	14
9420	mineral	1800	140	28		10	0.060	0.020	0.0023	1.1	0.14	0.058	2.0	65	26	23	12
9421	mineral	1900	150	31		11	0.050	0.020	0.0023	1.0	0.13	0.056	2.0	62	30	25	13
9418	mineral	1800	140	25		10	0.030	0.010	0.0032	0.94	0.11	0.056	7.0	57	30	25	13
9419	mineral	1900	140	28		10	0.040	0.010	0.0019	1.1	0.12	0.064	7.0	59	28	27	9.1

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Coldstream Conservation Area Date: 80/07/09



Location Code: 1001054

UTM: 17T 459500 4763100

Vegetation: grass, maple

Landform: moraine

Comments: very stoney at 30 cm+

Slope: gently sloping

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9434	surface	0-15	10YR 5/1	62	20	18	7.9	7.4	2.7	2.6	5.7			340	
9435	surface	0-15	10YR 5/1	58	21	21	7.9	7.4	3.2	2.4	7.9			350	
9432	mineral	15-30	10YR 7/3	66	19	16	8.0	7.4	0.80	0.56	4.7			190	
9433	mineral	15-30	10YR 7/3				7.9	7.4	0.92	0.52	3.1			180	
9430	mineral	30-48	5YR 3/4	55	22	23	8.0	7.7	1.1	0.44	6.2			300	
9431	mineral	30-48	5YR 3/4	70	14	16	8.2	7.7	0.74	0.36	2.1			230	
9428	mineral	48-90	10YR 5/9	81	9.0	11	8.7	7.9	0.33	0.20	0.5			190	
9429	mineral	48-90	10YR 5/4	77	11	12	8.5	7.9	0.61	0.37	2.2			210	

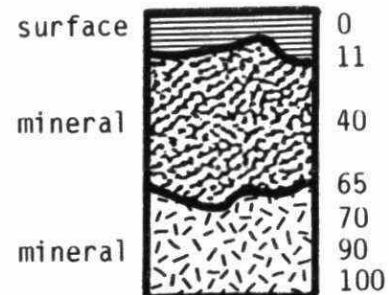
SOIL PROFILE INFORMATION (cont'd.)

Site: Coldstream Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9434	surface	2500	100	22		13	0.11	0.060	0.014	0.78	0.12	0.038	2.0	63	16	11	15
9435	surface	2700	120	28		14	0.10	0.060	0.018	0.73	0.11	0.042	3.0	69	18	12	18
9432	mineral	1400	47	6.0		7.2	0.11	0.040	0.0064	1.0	0.14	0.034	2.0	53	15	14	11
9433	mineral	1300	37	6.0		6.7	0.10	0.040	0.0054	0.79	0.11	0.028	2.0	53	17	14	9.5
9430	mineral	3200	86	23		16	0.010	0.010	0.0017	1.6	0.25	0.054	19	86	29	31	14
9431	mineral	1900	52	14		9.9	0.030	0.030	0.0029	0.95	0.13	0.036	43	62	38	46	10
9428	mineral	840	23	8.0		4.4	0.010	0.010	0.0013	0.34	0.040	0.015	68	35	20	30	6.0
9429	mineral	860	23	8.0		4.5	0.070	0.040	0.0050	0.43	0.050	0.019	64	39	21	19	6.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)



Site: Longwoods Road Conservation Area

Date: 80/07/09

Location Code: 1001055

UTM: 17T 453000 4743500

Vegetation: beech, elm, oak

Landform: sand plain

Comments: compact red layer at 72 cm.

Slope: very gentle slope

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9445	surface	0-11	5YR 2.5/2	74	6.0	20	6.3	5.6	3.2	1.61	15			280	
9446	surface	0-11	5YR 2.5/2				6.2	5.5	5.2	2.17	17			390	
9443	mineral	11-40	10YR 5/8	78	8.0	14	6.2	5.0	0.27	0.29	3.6			280	
9444	mineral	11-40	10YR 5/8	78	9.0	13	6.4	5.4	0.32	0.33	3.3			510	
9441	mineral	40-65	10YR 5/8	85	6.0	9.0	6.7	5.4	0.20	0.22	3.8			380	
9442	mineral	40-65	10YR 5/8	83	8.0	8.0	6.3	5.1	0.21	0.21	5.4			260	
9439	mineral	65-72	10YR 5/4	87	1.0	12	6.7	5.5	0.070	<0.11	2.1			380	
9440	mineral	65-72	10YR 5/4	88	6.0	6.0	6.4	5.3	0.010	0.16	4.8			470	
9438	mineral	72-90	7.5YR 4/4	65	20	15	6.6	5.5	0.11	0.22	4.0			690	
9436	mineral	90-100	10YR 5/4	92	4.0	5.0	7.2	5.6	0.070	<0.12	1.2			360	
9437	mineral	90-100	10YR 5/4	87	6.0	6.0	7.1	5.7	0.030	<0.11	0.70			420	30

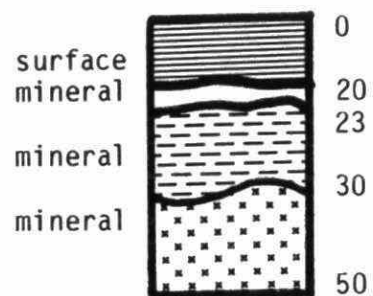
SOIL PROFILE INFORMATION (cont'd.)

Site: Longwoods Road Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9445	surface	1600	160	51		9.4	0.10	0.040	0.034	0.43	0.10	0.081	<1.0	70	10	4.4	23
9446	surface	2100	230	56		13	0.13	0.050	0.052	0.43	0.090	0.060	<1.0	77	10	4.5	36
9443	mineral	220	37	18	5.4	1.5	0.13	0.090	0.0048	0.50	0.12	0.020	<1.0	49	5.8	4.5	3.9
9444	mineral	340	33	21	<2.3	2.0	0.12	0.080	0.0081	0.49	0.11	0.030	<1.0	39	8.0	5.2	3.9
9441	mineral	190	26	34	<2.3	1.2	0.10	0.080	0.0045	0.47	0.12	0.022	<1.0	39	9.9		4.6
9442	mineral	190	47	30	3.0	1.5	0.10	0.070	0.0026	0.57	0.12	0.014	<1.0	55	7.9		4.5
9439	mineral	88	14	14	<2.3	0.65	0.050	0.040	0.0029	0.30	0.070	0.022	<1.0	29		4.9	5.5
9440	mineral	120	24	14	<2.3	0.85	0.080	0.060	0.0026	0.31	0.070	0.022	<1.0	32	8.3	5.5	4.7
9438	mineral	190	28	17		1.2	0.11	0.070	0.0051	0.45	0.11	0.033	<1.0	34	6.9	6.1	5.3
9436	mineral	74	14	8.0		<0.50	0.040	0.040	0.0033	0.34	0.070	0.028	<1.0	24	8.5		5.6
9437	mineral	110	9.0	8.0		0.64	0.030	0.030	0.0023	0.30	0.060	0.027	<1.0	25	14		4.7

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Dalewood Conservation Area Date: 80/07/09



Location Code: 1001056

UTM: 17T 485550 4739000

Landform: clay plain

Slope: very gentle slope

Vegetation: beech, maple

Comments: bleached layer at 20-23 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9453	surface	0-20	10YR2.5/1	17	49	33	6.8	6.3	5.1	3.1	12			600	
9454	surface	0-20	10YR2.5/1	19	48	33	6.9	6.4	5.5	3.8	9.2			700	
9451	mineral	20-23	10YR 5/3	17	41	43	6.5	6.0	1.2	0.60	6.5			300	
9452	mineral	20-23	10YR 5/3	17	51	32	6.7	6.0	1.5	0.86	5.4			310	
9449	mineral	23-30	10YR 4/4	11	34	55	7.3	7.0	0.86	0.82	4.8			500	
9450	mineral	23-30	10YR 4/4	11	36	53	7.8	7.4	0.61	0.48	6.0			420	
9447	mineral	30-50	10YR 4/3	13	37	51	8.2	7.8	0.73	0.40	5.0			340	
9448	mineral	30-50	10YR 4/3	8.0	38	54	8.3	7.8	0.48	0.34	4.4			460	

SOIL PROFILE INFORMATION (cont'd.)

Site: Dalewood Conservation Area

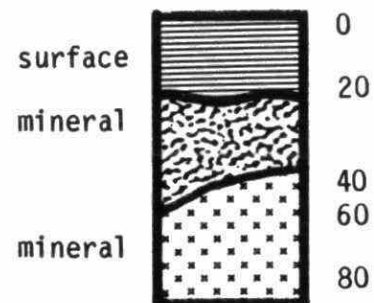
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9453	surface	3500	360	110		21	0.18	0.060	0.016	0.89	0.14	0.037	<1.0	82	27	13	19
9454	surface	3500	350	110		21	0.17	0.050	0.014	0.86	0.14	0.037	<1.0	80	24	12	18
9451	mineral	2500	250	51		15	0.17	0.050	0.0041	1.5	0.19	0.041	<1.0	83	44	28	10
9452	mineral	1900	180	40		11	0.22	0.070	0.0040	1.1	0.16	0.028	<1.0	68	23	18	9.6
9449	mineral	3200	260	62		18	0.090	0.020	0.0055	1.6	0.17	0.063	3.0	86	55	36	10
9450	mineral	3600	230	68		20	0.10	0.020	0.0047	1.6	0.18	0.061	3.0	87	48	36	11
9447	mineral	2800	150	56		15	0.030	0.010	0.0042	1.2	0.13	0.057	17	77	42	36	4.5
9448	mineral	2900	180	56		16	0.020	0.010	0.0033	1.1	0.11	0.053	16	74	43	31	8.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Springwater Conservation Area

Date: 80/07/09



Location Code: 1001057

UTM: 17T 497550 4732700

Vegetation: pine forest

Landform: clay plain

Comments: depth to faint mottling 60 cm.
evidence of plowing

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9461	surface	0-20	10YR 3/2	64	18	18	7.7	7.2	1.4	1.1	5.4			440	
9462	surface	0-20	10YR 3/2				7.6	7.1	2.1	1.4	8.1			430	
9459	mineral	20-40	7.5YR 4/4	64	10	25	8.2	7.7	0.16	0.34	7.9			330	
9460	mineral	20-40	7.5YR 4/4	65	11	24	8.3	7.6	0.23	0.31	8.9			280	
9457	mineral	40-60	10YR 5/3	11	53	35	8.4	7.9	0.35	0.35	11			750	
9458	mineral	40-60	10YR 5/3	20	41	39	8.4	7.8	0.16	0.45	11			260	
9455	mineral	60-80	10YR 6/4	3	68	28	8.4	7.9	0.25	0.38	11			700	
9456	mineral	60-80	10YR 6/4	4	70	26	8.6	7.9	0.17	0.22	8.6			630	

SOIL PROFILE INFORMATION (cont'd.)

Site: Springwater Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9461	surface	1300	190	20		8.1	0.040	0.010	0.011	0.68	0.080	0.043	<1.0	44	11	7.1	7.7
9462	surface	1500	210	30		9.4	0.040	<0.0020	0.013	0.75	0.080	0.048	<1.0	46	14	6.6	10
9459	mineral	1300	200	20		8.3	0.050	0.010	0.0016	1.6	0.13	0.052	1.0	56	25	13	6.0
9460	mineral	1300	200	22		8.3	0.050	0.010	0.0012	1.2	0.10	0.055	2.0	60	23	15	7.6
9457	mineral	1800	250	22		11	0.020	<0.0020	0.0031	1.4	0.12	0.054	16	64	32	20	6.9
9458	mineral	2100	300	25		13	0.020	<0.0020	0.0022	1.6	0.13	0.054	7.0	73	35	21	8.5
9455	mineral	1400	180	22		8.5	0.010	<0.0020	0.0031	1.0	0.080	0.037	32	53	35	18	5.3
9456	mineral	1400	180	22		8.5	0.010	<0.0020	0.0029	1.0	0.080	0.043	33	54	27	19	5.6

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Wheatley Provincial Park	Date: 81/05/05
surface	0	Location Code: 1001123	Parent Material: lacustrine clay
mineral	20	UTM: 17T 380500 4665000	Vegetation: ironwood, ash, red oak, sugar maple
	33	Landform: clay plain	Comments: mottle colour 7.5YR 7/8 at 32 cm
mineral	47	Slope: simple, class 1, level	mottle colour 7.5YR 5/6 at 50 cm



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17143	surface	0-20	10YR 3/1	34	17	49	6.3	5.9	6.0	5.0			25		0.16
17142	surface	0-20	10YR 3/1	29	23	48	6.3	5.8	5.0	4.9			32		0.22
17141	mineral	20-33	10YR 6/2	18	37	46	4.7	3.9	1.0	0.80			<3.0		6.9
17140	mineral	20-33	10YR 6/2	17	37	47	4.7	3.9	1.0	0.80			<3.0		7.0
17139	mineral	33-47	2.5Y 6/2	25	11	64	5.0	4.4	1.0	0.70			16		1.1
17138	mineral	33-47	2.5Y 6/2	21	18	61	5.6	4.9	1.0	0.90			7.0		0.090

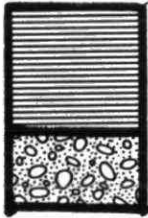
SOIL PROFILE INFORMATION (cont'd.)

Site: Wheatley Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17143	surface	3400	440	200		21	0.17	0.12	0.039	0.61	0.15	0.090	<1.0	100	19	17	18
17142	surface	2300	420	200		16	0.20	0.12	0.031	0.59	0.15	0.059	<1.0	94	16	15	14
17141	mineral	920	210	83	250	9.0	0.20	0.14	0.0035	1.4	0.16	0.025		72	22	23	3.9
17140	mineral	740	200	83	250	8.1	0.18	0.14	0.0025	1.2	0.14	0.015		65	17	18	4.7
17139	mineral	1600	370	95	62	12	0.17	0.070	0.0083	1.4	0.14	0.036		93	28	38	<3.0
17138	mineral	1700	420	88	9.0	12	0.14	0.050	0.0091	1.3	0.14	0.039		93	29	42	<3.0

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: The Glen Management Area	Date: 81/05/06
surface	0	Location Code: 1001126	
rock	20	UTM: 17T 500360 4942560	Vegetation: ironwood
		Landform: limestone outcrop	Comments: surface soil overlying limestone bedrock
		Slope: level	



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17154	surface	0-10	10YR 2/1				7.3	7.0							0.15
17153	surface	0-10	10YR 2/1				7.2	6.9							0.83

SOIL PROFILE INFORMATION (cont'd.)

Site: The Glen Management Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17154	surface	3500	870	170		25							43				
17153	surface	3500	1200	410		28							36				

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Pinery Provincial Park

Date: 81/05/05

surface 0
5
mineral 10
mineral 23
mineral 34
mineral 60



Location Code: 1001127

UTM: 17T 42100 4787100

Vegetation: red oak, birch

Landform: beach/dunes

Comments:

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17152	surface	0-5	10YR 2/1	68	11	21	5.5	4.9	12	3.5			9.0		7.0
17151	surface	0-5	10YR 2/1				5.2	4.8	22	5.1					
17150	mineral	5-10	10YR 5/1	88	<1.0	12	6.6	5.8	3.0	0.50			<3.0		0.91
17149	mineral	10-23	2.5Y 4/4	86	1.0	13	7.9	7.4	1.0	0.80			<3.0		<0.080
17148	mineral	10-23	2.5Y 4/4	86	<1.0	14	8.1	7.4	2.0	0.60			<3.0		0.10
17147	mineral	23-34	2.5Y 3/2	89	3.0	9.0	8.1	7.4	1.0	0.60			<3.0		<0.080
17146	mineral	23-34	2.5Y 3/2	86	4.0	10	8.0	7.4	2.0	0.60			<3.0		<0.080
17145	mineral	34-60	10YR 5/3	88	2.0	9.0	8.3	7.6	<0.50	0.40			<3.0		<0.080
17144	mineral	34-60	10YR 5/3	85	2.0	13	8.2	7.6	<0.50	0.40			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Pinery Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17152	surface	2100	480	39	<2.3	14	0.20	0.14	0.036	0.52	0.12	0.039		120	12	9.2	76
17151	surface	2700	680	84	5.0	19	0.25	0.10	0.040	0.63	0.15	0.046		140	12	11	130
17150	mineral	850	130	4.0		5.3	0.22	0.12	0.010	0.54	0.14	0.019	<1.0	40	3.9	7.2	7.7
17149	mineral	1100	120	2.0		6.4	0.024	0.010	0.0026	0.19	0.016	0.016	14	5.2	1.9	3.1	<3.0
17148	mineral	990	88	<0.80		5.6	0.066	0.051	0.0086	0.23	0.047	0.016	34	13	4.9	5.1	<3.0
17147	mineral	1400	100	2.0		8.5	0.052	0.032	0.0047	0.17		0.016	10	4.7	1.4	<2.0	3.8
17146	mineral	1200	110	<1.6		7.2	0.070	0.033	0.0060	0.25	0.040	0.015	21	6.6	2.9	4.4	<3.0
17145	mineral	1000	40	<1.6		5.4	0.013	0.012	0.0017	0.11	0.016	0.0029	27	4.5	1.9	2.8	<3.0
17144	mineral	670	29	<1.6		3.6	0.029	0.023	0.0033	0.17	0.030	0.0081	38	7.0	3.4	3.8	<3.0

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Galbraith Conservation Area	Date: 81/06/04
surface	0	Location Code: 1001131	
	35	UTM: 17T 505100 4829100	Vegetation: pine
mineral	55	Landform: till plain	Comments: mottling at 35+ cm
		Slope: level	

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17256	surface	0-20	10YR 4/1	16	49	34	6.2	5.8	3.0						
17255	surface	0-20	10YR 4/1	15	49	36	6.4	5.7	3.0						
17254	surface	20-35	10YR 4/1	17	50	33	7.0	6.0	2.0						
17253	surface	20-35	10YR 4/1	17	56	27	6.9	6.2	2.0						
17252	surface	20-35	10YR 4/1	17	51	32	7.0	6.4	1.0						
17251	surface	20-35	10YR 4/1	14	48	38	7.1	6.4	2.0						
17250	mineral	35-55	10YR 5/6	21	53	25	7.6	6.7	<0.50						
17249	mineral	35-55	10YR 5/6	24	52	24	7.5	6.9	<0.50						

SOIL PROFILE INFORMATION (cont'd.)

Site: Galbraith Conservation Area

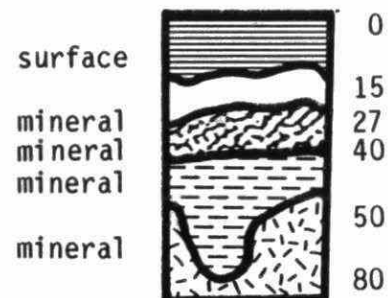
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
17256	surface	2000	570	73		14							<1.0				
17255	surface	2100	620	83		16							<1.0				
17254	surface	1900	500	21		14							<1.0				
17253	surface	2100	480	21		14							<1.0				
17252	surface	1900	540	26		14							<1.0				
17251	surface	2100	720	35		16							<1.0				
17250	mineral	1900	500	40		14							<1.0				
17249	mineral	1900	470	30		13							<1.0				

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Longwoods Conservation Area

Date: 81/05/13



Location Code: 1001134

UTM: 17T 460950 4747500

Vegetation: cedar

Landform: sand plain

Comments: site beside A.P.I.O.S.
precipitation collector

Slope: class 5, moderately steep

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18019	surface	0-15	10YR 3/3	83	9.0	8.0	5.5	4.9	2.0	1.5			5.0		1.5
18018	surface	0-15	10YR 3/3	84	8.0	8.0	5.2	4.6	2.0	1.0			<3.0		0.24
18017	mineral	15-27	10YR 5/6	81	12	6.0	5.9	5.2	1.0	0.40			<3.0		0.58
18016	mineral	15-27	10YR 5/6	81	13	6.0	6.0	5.4	<0.50	0.30			<3.0		<0.080
18015	mineral	27-40	10YR 5/8	71	16	13	6.0	5.5	<0.50	0.30			<3.0		0.094
18014	mineral	27-40	10YR 5/8	65	19	16	6.3	5.5	<0.50	0.20			<3.0		<0.080
18013	mineral	40-50	10YR 4/4	64*	17*	19*	5.7	5.1	1.0	0.30			<3.0		0.17
18012	mineral	40-50	10YR 4/4	37*	25*	38*	5.8	5.0	1.0	0.50			<3.0		<0.080
18011	mineral	50-80	10YR 5/6	88	3.0	9.0	6.2	5.4	<0.50	<0.10			<3.0		<0.080
18010	mineral	50-80	10YR 5/6	80	8.0	13	6.3	5.5	<0.50	0.20			<3.0		<0.080

* particle size verified by repeat analysis

SOIL PROFILE INFORMATION (cont'd.)

Site: Longwoods Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18019	surface	980	82	170	<2.3	6.0	0.11	0.10	0.016	0.60	0.17	0.023		72	9.3	7.0	13
18018	surface	720	59	120	11	4.5	0.10	0.10	0.013	0.53	0.15	0.020		66	8.4	6.6	11
18017	mineral	270	18	45	<2.3	1.6	0.12	0.095	0.0055	0.60	0.17	0.029	<1.0	50	8.5	8.1	3.5
18016	mineral	300	27	54	<2.3	1.9	0.098	0.049	0.0041	0.57	0.12	0.041	<1.0	42	10	7.6	6.2
18015	mineral	420	47	58		2.6	0.063	0.033	0.0031	0.54	0.088	0.033	<1.0	43	13	7.6	4.0
18014	mineral	640	82	54		4.0	0.071	0.031	0.0022	0.85	0.12	0.039	<1.0	48	20	11	4.7
18013	mineral	1200	160	70	<2.3	7.3	0.095	0.045	0.0044	1.2	0.15	0.043	<1.0	83	34	19	10
18012	mineral	1300	230	97	<2.3	8.5	0.12	0.055	0.0048	1.7	0.21	0.050	<1.0	100	49	28	14
18011	mineral	350	36	45	<2.3	2.1	0.037	0.019	0.0014	0.50	0.065	0.024	<1.0	50	14	6.5	7.1
18010	mineral	670	82	69		4.2	0.064	0.027	0.0022	0.87	0.098	0.032	<1.0	76	23	11	12

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: John E. Pearce Provincial Park Date: 81/06/17

surface
mineral
mineral
mineral



Location Code: 1001165

UTM: 17T 463850 4716800

Landform: sand plain

Slope: gentle slopes

Vegetation: maple, elm

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17367	surface	0-20	10YR 3/1	64	16	20	5.8	5.2	1.0	2.4			4.0		0.84
17366	surface	0-20	10YR 3/1	66	20	14	5.2	5.0	1.0	3.2			10		0.87
17365	mineral	20-30	10YR 4/6	72	11	17	6.0	5.4	1.0	0.80			<3.0		0.14
17364	mineral	20-30	10YR 4/6	70	14	16	5.9	5.3	1.0	0.80			<3.0		0.50
17363	mineral	30-60	10YR 4/4	72	14	14	6.0	5.4	1.0	0.50			<3.0		0.20
17362	mineral	30-60	10YR 4/4	66	16	18	6.1	5.5	1.0	0.50			<3.0		0.12
17361	mineral	60-70	10YR 5/4	68	16	16	5.9	5.5	1.0	0.40			<3.0		<0.080
17360	mineral	60-70	10YR 5/4	73	15	12	6.2	5.6	<0.50	0.30			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: John E. Pearce Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
17367	surface	1500	150	63	<2.3	9.0	0.14	0.12	0.0071	0.37	0.14	0.0086	<1.0	34	4.6	2.5	8.3
17366	surface	2000	170	67	7.0	12	0.12	0.11	0.0082	0.38	0.13	0.011	<1.0	38	4.6	2.7	8.6
17365	mineral	510	39	4.0	4.0	2.9	0.17	0.20	0.00090	0.51	0.29	0.0030	<1.0	35	5.6	6.8	<3.0
17364	mineral	500	42	4.0	<2.3	2.8	0.19	0.20	0.0012	0.54	0.28	0.0046	<1.0	31	4.1	4.3	<3.0
17363	mineral	400	32	<1.6	<2.3	2.3	0.13	0.15	0.0011	0.44	0.24	0.0035	<1.0	25	4.6	5.7	<3.0
17362	mineral	390	30	<1.6		2.2	0.12	0.15	0.0011	0.44	0.23	0.0039	<1.0	26	4.6	5.7	<3.0
17361	mineral	320	28	<1.6		1.8	0.088	0.080	0.0013	0.39	0.17	0.0069	<1.0	21	4.5	6.2	4.2
17360	mineral	220	21	<1.6		1.3	0.072	0.068	0.0013	0.34	0.15	0.0081	<1.0	21	4.5	6.2	<3.0

SOIL PROFILE INFORMATION


Horizon Depth (cm) Site: A. W. Campbell Conservation Area Date: 81/06/17

surface 0 Location Code: 1001166

mineral 20 UTM: 17T 431650 4741550 Vegetation: maple, elm

mineral 30 Landform: clay plain Comments: mottle colour 10YR 6/6 at 30-50 cm.

mineral 50 Slope: simple, class 1, level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17343	surface	0-20	10YR 2/1	10	44	46	6.3	5.9	7.0	7.4			11		0.16
17342	surface	0-20	10YR 2/1	9.0	38	53	6.5	5.9	7.0	6.2			11		0.21
17341	mineral	20-30	10YR 6/2	14	34	52	4.6	3.9	1.0	1.1			<3.0		10
17340	mineral	20-30	10YR 6/2	12	46	43	4.8	3.9	1.0	0.90			<3.0		11
17339	mineral	30-50	10YR 5/2	3.0	34	63	7.5	7.0	1.0	0.70			<3.0		<0.080
17338	mineral	30-50	10YR 5/2	2.0	35	62	7.4	7.2	1.0	0.90			<3.0		0.096

SOIL PROFILE INFORMATION (cont'd.)

Site: A. W. Campbell Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
17343	surface	3800	500	400		24	0.20	0.11	0.034	0.81	0.18	0.075	<1.0	82	12	17	20
17342	surface	3300	490	360		21	0.19	0.10	0.034	0.81	0.17	0.072	<1.0	80	12	17	18
17341	mineral	770	120	96	370	8.7	0.19	0.095	0.0030	0.92	0.17	0.0098		67	11	22	6.2
17340	mineral	710	120	110	400	8.8	0.18	0.10	0.0028	0.94	0.17	0.012		67	9.9	21	6.9
17339	mineral	2400	390	96	<4.5	15	0.035	0.018	0.0048	1.1	0.15	0.040	2.0	79	25	38	5.6
17338	mineral	3000	390	88		18	0.035	0.018	0.0048	1.1	0.15	0.043	2.0	84	28	39	7.3

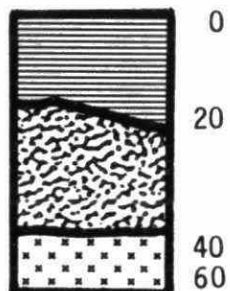
SOIL PROFILE INFORMATION

Horizon Depth (cm)

surface

mineral

mineral



Site: Mill Pond Conservation Area

Location Code: 1001167

UTM: 17T 460950 4747500

Landform: spillway

Slope: moderate slope

Vegetation: elm

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17359	surface	0-20	10YR 3/2	31	42	27	7.8	7.3	2.0	1.4			6.0		<0.080
17358	surface	0-20	10YR 3/2	34	35	31	7.5	7.1	1.0	1.2			<3.0		<0.080
17357	mineral	20-40	10YR 5/3	23	39	38	7.9	7.4	<0.50	0.50			<3.0		<0.080
17356	mineral	20-40	10YR 5/3	33	43	23	7.9	7.4	<0.50	0.50			<3.0		<0.080
17355	mineral	40-60	10YR 4/3	33	44	22	7.9	7.3	1.0	0.40			<3.0		<0.080
17354	mineral	40-60	10YR 4/3	27	53	21	8.0	7.4	1.0	0.70			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Mill Pond Conservation Area

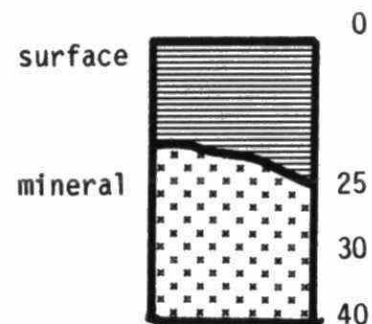
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17359	surface	2500	120	110		14	0.041	0.016	0.015	0.42	0.052	0.023	14	42	12	9.5	10
17358	surface	2300	86	98		12	0.041	0.016	0.015	0.47	0.064	0.026	14	40	12	8.4	9.5
17357	mineral	1300	42	47		6.8	0.022	0.0080	0.0053	0.42	0.052	0.023	20	34	11	9.0	6.6
17356	mineral	1500	51	55		8.0	0.025	0.012	0.0057	0.40	0.049	0.020	19	33	10	7.5	5.2
17355	mineral	1300	39	51		6.8	0.031	0.013	0.0060	0.44	0.064	0.021	18	35	11	9.5	4.3
17354	mineral	1300	53	35		7.1	0.028	0.010	0.0056	0.36	0.043	0.020	26	32	9.9	7.5	4.6

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Craigleith Provincial Park

Date: 81/06/23



Location Code: 1001185

UTM: 17T 557900 4931000

Landform: clay plain

Slope: level

Vegetation: grasses, shrubs

Comments: depth to shale bedrock 40 cm
road cut, soil below 30 cm not
sampled

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18198	surface	0-25	2.5YR 5/2	2.0	34	63	7.6	7.3	2.0	2.4					0.50
18199	mineral	25-30	2.5YR 6/2	<1.0	18	81	8.3	7.6	1.0	0.80					0.11


SOIL PROFILE INFORMATION (cont'd.)

Site: Craigleith Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18198	surface	3000	300	290		18	0.10	0.059	0.016	1.3	0.12	0.054	2.0	80	18	25	<3.0
18199	mineral	2200	320	87		14	0.018	0.013	0.0038	1.3	0.082	0.021	12	52	15	24	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Eugenia Falls Conservation Area Date: 81/07/15

surface  0 Location Code: 1001187

rock 8 UTM: 17T 537850 4906600 Vegetation: cedar, maple

Landform: limestone plain Comments: depth to limestone bedrock 8 cm.
Slope: level very stoney

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18257	surface	0-8	10YR 3/2	16	42	42	7.2	6.9	7.0	6.3					<0.080
18256	surface	0-8	10YR 3/2	16	44	41	7.0	6.8	7.0	7.0					<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Eugenia Falls Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO3 (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18257	surface	950	830	140		12	0.21	0.097	0.068	1.2	0.20	0.13	1.9	77	12	11	43
18256	surface	3800	760	140		24	0.19	0.091	0.063	1.1	0.18	0.12	2.0	72	12	11	38

SOIL PROFILE INFORMATION

Horizon Depth (cm)

surface

surface/
mineral



Site: Wawanosh Valley Conservation Area

Date: 81/07/15

Location Code: 1001202

UTM: 17T 462900 4852600

Vegetation: cedar

Landform: kame moraine

Comments: very stoney

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18270	surface	0-17	10YR 3/2	61	18	20	7.7	7.3	4.0	2.4					0.088
18269	surface	0-17	10YR 3/2	62	18	20	7.7	7.3	5.0	2.6					<0.080
18268	surface mineral	17-20	7.5YR 5/6	61	20	19	7.6	7.2	3.0	1.4					<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Wawanosh Valley Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18270	surface	1700	220	56		11	0.18	0.13	0.060	0.97	0.16	0.088	13	66	7.4	10	10
18269	surface	1600	200	62		9.5	0.18	0.10	0.054	0.94	0.14	0.089	15	70	8.9	10	16
18268	surface mineral	1000	160	31		6.5	0.22	0.17	0.030	1.6	0.22	0.094	6.0	84	14	19	6.2

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Falls Reserve Conservation Area

Date: 81/07/15

surface



Location Code: 1001203

UTM: 17T 449150 4840800

Vegetation: grasses

Landform: moraine

Slope: gentle slope

Comments: exceedingly stoney
many weathered rocks (quartz,
sandstone), 15-20 cm depth not
sampled

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18267	surface	0-15	10YR 2/2	55	23	22	7.8	7.3	6.0	3.3					<0.080
18266	surface	0-15	10YR 2/2	54	24	22	7.8	7.4	6.0	3.5					0.26

SOIL PROFILE INFORMATION (cont'd.)

Site: Falls Reserve Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18267	surface	1700	150	90		10	0.13	0.13	0.049	1.4	0.31	0.14	12	120	10	16	28
18266	surface	2000	160	99		11	0.13	0.12	0.051	1.3	0.30	0.15	11	120	11	17	26

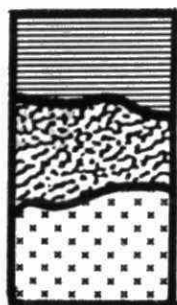
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Filtration Plant, Union

Date: 81/07/15

surface



0

25

45

55

mineral

mineral

60

Location Code: 1001204

UTM: 17T 484250 4727350

Vegetation: grass

Landform: sand plain/clay plain overlap

Comments: near A.P.I.O.S. precipitation collector, topsoil disturbed

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18264A	surface	0-25	10YR 4/4	39	35	26	7.3	6.5	1.0	0.60			15		<0.080
18263	surface	0-25	10YR 4/4	33	39	28	7.2	6.4	1.0	0.60					<0.080
18262	mineral	25-45	10YR 5/4	50	36	14	7.2	6.4	<0.50	0.30					<0.080
18261	mineral	25-45	10YR 5/4	51	33	16	7.8	7.0	<0.50	0.30					<0.080
18260	mineral	45-55	10YR 5/4	51	32	17	7.5	6.8	<0.50	0.20					<0.080
18265	mineral	45-55	10YR 5/4	30*	55*	15*	7.7	7.0	<0.50	0.30					<0.080
18259	mineral	55-60	10YR 5/6	16	71	13	8.5	7.7	<0.50	<0.10					<0.080
18258	mineral	55-60	10YR 5/6	18	64	17	8.5	7.7	<0.50	0.20					<0.080

* Texture verified by repeat analysis.

SOIL PROFILE INFORMATION (cont'd.)

Site: Filtration Plant, Union

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18264	surface	1400	220	82		9.2	0.077	0.037	0.0066	0.69	0.094	0.033	<1.0	43	11	11	7.7
18263	surface	1400	200	69		9.0	0.067	0.031	0.0037	0.89	0.10	0.034	<1.0	45	13	11	6.3
18262	mineral	700	88	34		4.4	0.030	0.017	0.0013	0.48	0.058	0.033	2.0	32	10	7.1	<3.0
18261	mineral	1200	110	29		6.7	0.031	0.018	0.0018	0.57	0.064	0.037	2.0	42	15	8.9	8.4
18260	mineral	970	130	31		6.0	0.036	0.020	0.0012	0.66	0.074	0.040	2.0	92	35	19	12
18265	mineral	1700	200	51		10	0.036	0.023	0.0016	0.66	0.076	0.043	1.0	42	17	11	3.6
18259	mineral	680	60	19		3.9	0.010	0.0070	0.0021	0.35	0.028	0.024	23	24	12	5.8	<3.0
18258	mineral	680	58	13		3.9	0.0090	0.0060	0.0022	0.33	0.031	0.023	23	24	13	5.5	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Point Farms Provincial Park

Date: 81/07/16

Location Code: 1001205

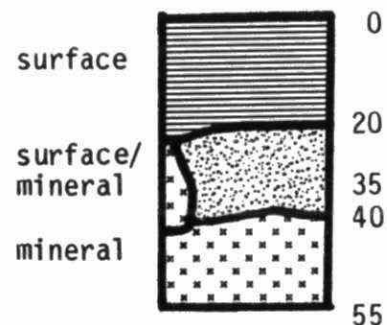
UTM: 17T 441450 4850250

Vegetation: maple, grasses

Landform: till plain

Comments: 18273 from soil pocket on left side of profile

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18277	surface	0-20	10YR 2/2				7.0	6.8	7.0	6.3					0.38
18276	surface	0-20	10YR 2/2	47	29	24	7.4	6.9	5.0	6.9					0.30
18275	surface mineral	20-35	10YR 5/8	42	40	18	7.3	6.8	2.0	1.9					0.16
18274	surface mineral	20-35	10YR 5/8	36	36	21	7.2	6.8	3.0	2.1					0.099
18273	surface mineral	35-40	7.5YR 5/6	41	49	11	7.7	7.1	1.0	0.90					<0.080
18272	mineral	40-55	2.5YR 7/4	5.0	82	12	8.5	7.6	<0.50	0.30					<0.080
18271	mineral	40-55	2.5YR 7/4	4.0	85	11	8.4	7.6	<0.50	0.20					<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Point Farms Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18277	surface	5000	950	120		33	0.11	0.066	0.0084	0.43	0.098	0.011	<1.0	30	4.9	4.7	8.8
18276	surface	5000	890	130		31	0.099	0.058	0.0095	0.47	0.10	0.014	<1.0	31	5.4	4.8	6.7
18275	surface mineral	1500	280	52		9.9	0.25	0.23	0.0061	0.91	0.36	0.018	<1.0	38	6.4	13	<3.0
18274	surface mineral	1600	300	56		11	0.30	0.24	0.0058	0.94	0.36	0.019	<1.0	36	4.9	11	<3.0
18273	surface mineral	790	180	43		5.5	0.11	0.070	0.010	0.61	0.11	0.036	27	14	6.9	9.5	<3.0
18272	mineral	850	130	28		5.4	0.0030	0.016	0.0035	0.26	0.031	0.0095	57	3.7	4.9	4.8	<3.0
18271	mineral	530	70	17		3.3	0.030	0.013	0.0033	0.25	0.028	0.0093	57	2.6	3.9	4.9	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Clinton Conservation Area

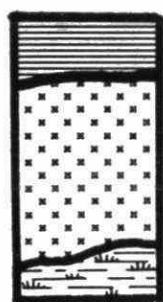
Date: 81/07/16

surface

surface

mineral

mineral



Location Code: 1001206

UTM: 17T 457550 4827400

Landform: till plain

Slope: level

Vegetation: grasses

Comments: stoney at 80 cm, near swamp

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18285	surface	0-15	10YR 3/1	33	34	33	7.7	7.3	3.0	3.1			4.0		<0.080
18284	surface	0-15	10YR 3/1	35	38	27	7.8	7.3	3.0	3.2			<3.0		<0.080
18283	surface	15-40	10YR 3/2	38	37	25	7.9	7.4	2.0	1.9			<3.0		<0.080
18282	surface	15-40	10YR 3/2	40	35	25	7.9	7.4	2.0	2.0			<3.0		<0.080
18281	mineral	40-70	10YR 5/6	48	45	7.0	8.1	7.5	1.0	2.0			<3.0		<0.080
18280	mineral	40-70	10YR 5/6	56	40	4.0	8.1	7.5	1.0	1.4			<3.0		<0.080
18279	mineral	70-80	10YR 4/6	65	21	14	8.3	7.6	1.0	0.80			<3.0		<0.080
18278	mineral	70-80	10YR 4/6	67	18	15	8.3	7.6	1.0	0.80			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Clinton Conservation Area

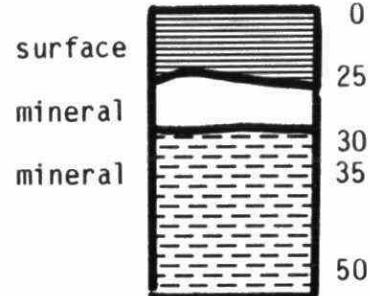
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18285	surface	2800	220	82		16	0.077	0.058	0.026	0.77	0.098	0.095	19	62	13	13	6.0
18284	surface	2400	210	71		14	0.074	0.050	0.017	0.72	0.095	0.093	19	55	12	12	<3.0
18283	surface	1900	170	39		11	0.078	0.044	0.014	0.75	0.062	0.075	36	41	10	9.6	<3.0
18282	surface	2000	160	37		11	0.077	0.044	0.014	0.50	0.062	0.071	37	37	8.9	9.3	<3.0
18281	mineral	1600	120	27		9.2	0.048	0.031	0.0058	0.39	0.041	0.061	41	30	8.1	6.6	<3.0
18280	mineral	1300	97	23		7.5	0.051	0.033	0.0066	0.39	0.041	0.065	41	21	6.4	7.6	<3.0
18279	mineral	860	58	16		4.8	0.044	0.028	0.0053	0.36	0.038	0.054	46	18	5.9	6.8	<3.0
18278	mineral	880	58	14		4.9	0.046	0.030	0.0054	0.37	0.035	0.056	42	20	5.4	7.3	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Morrison Dam Conservation Area

Date: 81/06/16



Location Code: 1001207

UTM: 17T 463200 4800400

Vegetation: white pine

Landform: till plain

Comments: pine needle litter layer

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18291	surface	0-25	10YR 3/2	10	52	39	7.5	7.0	3.0	2.5			<3.0		<0.080
18290	surface	0-25	10YR 3/2	11	57	32	7.4	6.9	2.0	2.3			<3.0		<0.080
18289	mineral	25-30	10YR 6/4	11	57	32	7.6	7.0	1.0	0.60			<3.0		<0.080
18288	mineral	30-35	5YR 4/4	5.0	36	59	7.6	7.0	1.0	0.50			<3.0		<0.080
18287	mineral	35-50	5YR 4/2	4.0	30	66	7.9	7.4	1.0	2.4			<3.0		<0.080
18286	mineral	35-50	5YR 4/2	16	29	54	7.9	7.4	1.0	0.80			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Morrison Dam Conservation Area

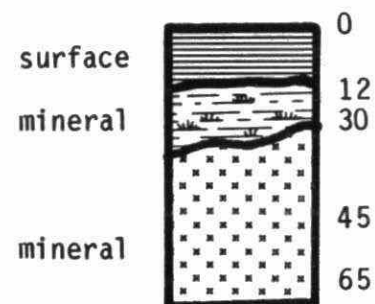
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18291	surface	2500	220	140		15	0.091	0.044	0.014	0.84	0.13	0.039	<1.0	51	10	13	14
18290	surface	2200	210	160		13	0.091	0.046	0.013	0.81	0.12	0.039	<1.0	57	11	14	16
18289	mineral	1400	180	56		8.5	0.096	0.047	0.0035	0.76	0.11	0.026	<1.0	41	8.8	14	8.5
18288	mineral	2100	210	74		12	0.12	0.043	0.0035	1.2	0.18	0.047	<1.0	60	19	26	10
18287	mineral	2600	240	78		15	0.095	0.037	0.0040	1.3	0.19	0.056	<1.0	75	25	33	11
18286	mineral	2600	210	79		15	0.079	0.020	0.0046	1.2	0.17	0.053	3.0	66	24	30	10

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Rondeau Provincial Park

Date: 81/08/10



Location Code: 1001224

UTM: 17T 430200 4685350

Landform: sand spit

Slope: moderate slope

Vegetation: maple, beech, elm, birch, grasses

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18369	surface	0-12	10YR 2/1	85	5.0	11	7.5	7.1	10	3.2			4.0		<0.080
18368	surface	0-12	10YR 2/1	87	3.0	10	7.5	7.1	12	4.4			<3.0		0.17
18367	mineral	12-30	10YR 4/4	94	2.0	5.0	8.6	7.6	1.0	0.30			<3.0		<0.080
18366	mineral	12-30	10YR 4/4	89	2.0	9.0	8.5	7.6	1.0	0.40			<3.0		<0.080
18365	mineral	30-45	5Y 6/1	95	<1.0	5.0	8.8	7.7	<0.50	0.20			<3.0		<0.080
18364	mineral	30-45	5Y 6/1	92	<1.0	8.0	8.8	7.7	1.0	0.20			<3.0		<0.080
18363	mineral	45-65	5Y 6/1	93	<1.0	8.0	8.7	7.7	<0.50	<0.10			<3.0		<0.080
18362	mineral	45-65	5Y 6/1	97	<1.0	3.0	8.8	7.7	<0.50	<0.10			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Rondeau Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18369	surface	2900	190	48		16	0.087	0.043	0.031	0.50	0.071	0.044	5.0	120	83	11	45
18368	surface	2500	160	46		14	0.11	0.052	0.042	0.70	0.085	0.061	7.0	150	96	12	51
18367	mineral	450	15	12		2.4	0.020	0.012	0.0043	0.27	0.020	0.013	22	27	100	7.6	3.6
18366	mineral	570	18	18		3.0	0.020	0.012	0.0041	0.28	0.017	0.012	21	27	80	8.2	<3.0
18365	mineral	310	10	12		1.6	0.019	0.0090	0.0041	0.24	0.020	0.011	21	26	72	12	5.5
18364	mineral	340	9.0	16		1.8	0.017	0.0090	0.0039	0.25	0.018	0.011	20	30	100	7.7	7.5
18363	mineral	230	7.0	19		1.2	0.021	0.0090	0.0036	0.24	0.017	0.012	23	22	37	6.2	7.9
18362	mineral	250	8.0	16		1.4	0.023	0.012	0.0036	0.24	0.020	0.012	21	19	25	6.2	4.3

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: C.M. Wilson Conservation Area Date: 81/08/10

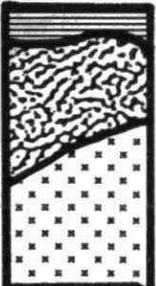
surface 0 Location Code: 1001225

mineral 10 UTM: 17T 409100 4691700 Vegetation: maple, oak, elm

mineral 15 Landform: kame moraine Comments:

mineral 35 Slope: level

mineral 45



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18376	surface	0-9	5YR 2.5/2	33	41	27	7.1	6.7	3.0	3.7			5.0		0.21
18375	surface	0-9	5YR 2.5/2	33	41	26	7.2	6.8	3.0	3.7			5.0		0.19
18374	mineral	10-15	10YR 4/6	38	44	19	7.2	6.5	1.0	1.2			<3.0		0.76
18373	mineral	15-35	10YR 4/4	32	45	24	7.4	6.9	1.0	0.90			<3.0		<0.080
18372	mineral	15-35	10YR 4/4	32	37	30	7.6	6.9	1.0	0.90			<3.0		<0.080
18371	mineral	35-45	10YR 5/4	55	34	11	8.4	7.5	1.0	0.30			<3.0		<0.080
18370	mineral	35-45	10YR 5/4	44	40	16	8.2	7.5	1.0	0.40			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: C.M. Wilson Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18376	surface	2500	370	100		16	0.14	0.087	0.0030	0.47	0.14	0.0059	<1.0	40	13	9.7	3.4
18375	surface	2500	350	130		16	0.11	0.085	0.0033	0.45	0.14	0.0069	<1.0	32	6.6	6.7	13
18374	mineral	1000	300	24	<4.5	7.6	0.12	0.14	0.0014	0.51	0.22	0.0050	<1.0	30	5.6	8.7	6.0
18373	mineral	1100	300	26		8.1	0.11	0.085	0.0041	0.55	0.14	0.011	<1.0	30	6.6	9.2	3.3
18372	mineral	1400	500	28		11	0.14	0.088	0.0072	0.83	0.16	0.019	<1.0	39	8.6	12	7.3
18371	mineral	920	110	24		5.5	0.019	0.011	0.0028	0.43	0.045	0.016	23	21	9.6	9.1	4.5
18370	mineral	1400	170	26		8.6	0.029	0.016	0.0038	0.42	0.054	0.013	21	18	6.8	8.5	4.5

SOIL PROFILE INFORMATION

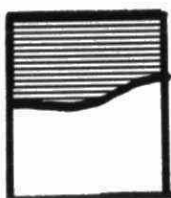
Horizon Depth (cm)

Site: North Easthope Collector, Stratford

Date: 81/08/06

surface 0

mineral



Location Code: 1001226

UTM: 17T 509850 4805750

Landform: till plain

Slope: level

Vegetation: grasses

Comments: A.P.I.O.S. rain collector site,
soil below 15 cm depth not sampled

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18349	surface	0-15	10YR 3/2	17	46	37	6.4	5.8	3.0	2.3			<3.0		<0.080
18348	surface	0-15	10YR 3/2	17	50	34	6.5	5.8	3.0	2.5			5.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: North Easthope Collector, Stratford

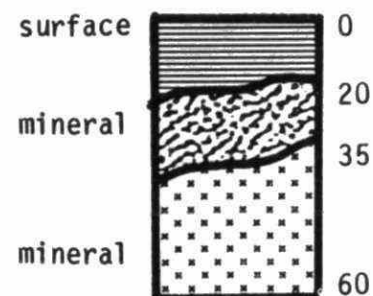
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18349	surface	1900	240	100		12	0.19	0.12	0.015	0.86	0.17	0.058	<1.0	79	15	16	8.0
18348	surface	2000	260	130		12	0.19	0.11	0.017	0.84	0.17	0.054	<1.0	74	13	14	6.7

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Parkhill Conservation Area

Date: 81/08/06



Location Code: 1001227

UTM: 17T 447550 4778800

Vegetation: maple, beech, oak

Landform: sand plain/till plain

Comments: iron stains throughout profile

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18355	surface	0-20	10YR 2/1	73	9.0	18	6.9	6.5	4.0	4.7			4.0		<0.080
18354	surface	0-20	10YR 2/1	66	10	24	7.1	6.8	3.0	5.0			5.0		<0.080
18353	mineral	20-35	10YR 6/6	78	4.0	18	8.7	7.7	<0.50	<0.10			<3.0		0.090
18352	mineral	20-35	10YR 6/6	73	5.0	22	8.6	7.7	<0.50	<0.10			<3.0		<0.080
18351	mineral	35-60	10YR 6/3	84	3.0	13	9.0	7.8	<0.50	<0.10			<3.0		<0.080
18350	mineral	35-60	10YR 6/3	80	4.0	16	9.0	7.8	<0.50	<0.10			5.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Parkhill Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18355	surface	2400	220	39		14	0.089	0.076	0.034	0.54	0.12	0.15	<1.0	57	10	10	10
18354	surface	3000	260	39		17	0.10	0.087	0.043	0.50	0.11	0.12	<1.0	50	8.9	9.8	11
18353	mineral	270	14	8		1.5	0.021	0.0080	0.0011	0.28	0.025	0.013	27	7.3	5.5	3.3	<3.0
18352	mineral	280	14	7		1.6	0.026	0.0090	0.0013	0.25	0.022	0.019	29	8.4	4.7	4.6	<3.0
18351	mineral	210	11	7		1.2	0.017	0.0080	0.0014	0.22	0.017	0.0085	32	8.9	5.1	2.6	<3.0
18350	mineral	210	7	6		1.1	0.011	0.0050	0.0013	0.19	0.014	0.010	34	8.9	3.8	3.6	<3.0

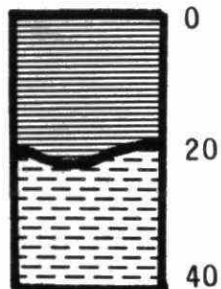
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Rock Glen Conservation Area

Date: 81/08/06

surface



Location Code: 1001228

UTM: 17T 433400 4770450

Vegetation: pine, maple, elm, grasses

Landform: clay plain

Comments:

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18359	surface	0-20	10YR 3/2	54	23	23	6.5	5.8	3.0	2.0			<3.0		<0.080
18358	surface	0-20	10YR 3/2	53	23	24	7.2	6.7	3.0	1.8			<3.0		0.10
18357	mineral	20-35	7.5YR 4/4	24	27	49	7.7	6.9	1.0	0.80			<3.0		<0.080
18356	mineral	20-35	7.5YR 4/4	26	26	49	7.7	6.9	1.0	0.80			<3.0		0.21

SOIL PROFILE INFORMATION (cont'd.)

Site: Rock Glen Conservation Area

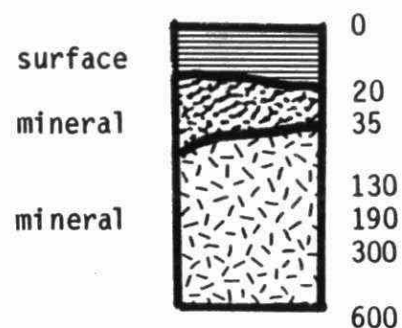
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18359	surface	400	300	120		4.7	0.14	0.046	0.020	0.89	0.11	0.028	<1.0	78	16	19	22
18358	surface	370	290	110		4.4	0.14	0.048	0.021	0.86	0.099	0.028	<1.0	76	16	19	19
18357	mineral	3000	390	100		17	0.097	0.040	0.0084	1.2	0.17	0.035	1.0	82	31	39	14
18356	mineral	3000	390	110		18	0.062	0.028	0.0067	1.2	0.18	0.035	1.0	74	30	36	11

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Wheatley Provincial Park

Date: 80/06/04



Location Code: 1001347

UTM: 17T 380500 4665000

Vegetation: grass

Landform: till plain

Slope: nearly level

Comments: on cliff, eroded by Lake Erie
Samples taken at various points
down cliff face, not by horizon

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9120	surface	0-20	10YR 3/1	51	22	27	8.3	7.7	1.5	0.87	12			430	
9121	surface	0-20	10YR 3/1	43	29	28	7.8	7.6	1.6	1.3	14			370	
9118	mineral	20-35	10YR 4/4	18	36	45	6.4	5.7	0.57	0.71	16			320	
9119	mineral	20-35	10YR 4/4	19	36	46	6.7	6.2	0.59	0.78	13			380	
9116	mineral	40	10YR 6/3	9.0	35	56	7.0	6.4	0.52	0.88	19			520	
9117	mineral	40	10YR 6/3	12	34	54	7.7	7.3	0.59	0.93	14			670	
9114	mineral	130	7.5YR 4/4	13	46	42	8.6	7.9	0.74	0.52	10			590	
9115	mineral	130	7.5YR 4/4	14	40	46	8.6	7.9	0.33	0.60	10			480	
9113	mineral	190	7.5YR 4/4	15	40	46	8.6	7.9	0.31	0.55	23			550	
9122	mineral	300	10YR 6/3	24	35	41	8.2	7.9	0.47	0.59	50			540	
9123	mineral	600	10YR 6/2	17	38	45	8.2	7.9	0.69	0.59				620	

SOIL PROFILE INFORMATION (cont'd.)

Site: Wheatley Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9120	surface	1500	37	100		7.8	0.070	0.020	0.0064	1.1	0.090	0.046	14	75	53	18	44
9121	surface	2000	79	84		10	0.020	<0.0020	0.0047	1.1	0.11	0.043	8.0	86	36	18	45
9118	mineral	1800	230	80		11	0.22	0.070	0.0013	1.8	0.22	0.018	<1.0	100	36	32	11
9119	mineral	1400	240	85		9.2	0.12	0.030	0.0080	1.6	0.21	0.021	<1.0	100	44	33	12
9116	mineral	2900	430	84		18	0.19	0.060	0.0016	1.8	0.22	0.065	<1.0	100	46	52	12
9117	mineral	3600	400	73		21	0.010	0.030	0.0028	1.8	0.21	0.052	<1.0	110	44	50	10
9114	mineral	1900	230	42		11	0.010	0.010	0.0037	1.1	0.090	0.034	23	61	40	30	7.6
9115	mineral	1800	240	37		11	0.010	<0.0020	0.0039	1.1	0.11	0.038	22	64	51	30	9.0
9113	mineral	1300	350	47		9.6	0.020	0.010	0.0037	1.0	0.070	0.034	28	58	41	28	7.0
9122	mineral	1800	200	63		11	0.030	0.010	0.0036	1.2	0.11	0.037	16	83	50	34	14
9123	mineral	3000	840	100		22	0.060	0.020	0.0031	0.94	0.060	0.027	22	86	69	38	10

SOIL BASELINE ANALYTICAL DATA, 1980-1981

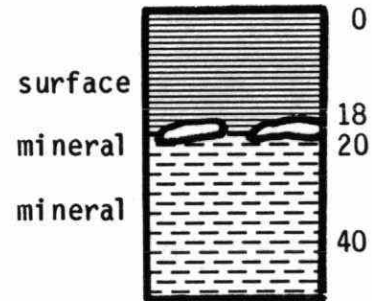
WEST CENTRAL REGION

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, A + B1

Date: 80/09/08



Location Code: 2001001

UTM: 17T 575400 4739750

Landform: clay plain

Slope: level

Vegetation: eastern white pine, white birch
white ash

Comments: irregular, discontinuous bleached
horizon at 18-20 cm (9797, 9798)

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9801	surface	0-15	10YR 4/2	10	45	44	6.4	5.8	4.7	3.1	21			800	
9802	surface	0-15	10YR 4/2	7.0	45	48	6.4	5.8	4.3	3.1	17			760	
9797	surface mineral	18-20	10YR 5/4	5.0	35	60	6.0	5.5	1.0	0.88	11			570	
9798	surface mineral	18-20	10YR 5/4	9.0	42	49	6.1	5.5	1.6	1.5	11			710	
9799	mineral	20-30	7.5YR 5/4	4.0	25	71	5.8	5.3	0.81	0.94	12			660	
9800	mineral	20-30	7.5YR 5/4	4.0	24	71	5.8	5.4	0.80	0.93	13			630	
9795	mineral	30-40	7.5YR 5/4	2.0	16	82	6.0	5.7	0.76	0.90	21			670	
9796	mineral	30-40	7.5YR 5/4	2.0	17	81	5.8	5.4	0.64	0.84	19			710	

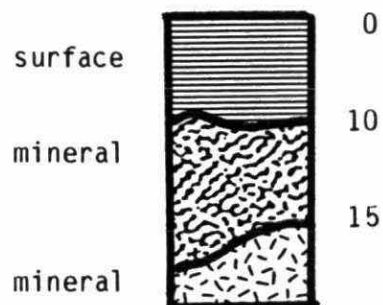
SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, A + B1

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9801	surface	2900	180	140		16	0.21	0.080	0.049	1.1	0.15	0.10	<1.0	110	17	22	31
9802	surface	2900	170	130		16	0.21	0.080	0.044	1.2	0.16	0.11	<1.0	100	16	22	29
9797	surface mineral	2500	200	110		14	0.19	0.080	0.0067	1.5	0.19	0.058	<1.0	110	25	34	16
9798	surface mineral	2000	170	78		11	0.20	0.080	0.013	1.3	0.17	0.072	<1.0	97	20	26	18
9799	mineral	3100	300	130	<4.5	18	0.16	0.080	0.0036	1.6	0.21	0.039		110	33	37	11
9800	mineral	2700	270	130	<4.5	16	0.17	0.080	0.0047	1.7	0.23	0.050	<1.0	110	32	42	16
9795	mineral	3500	320	140		20	0.12	0.060	0.0050	1.9	0.24	0.053	<1.0	120	39	48	12
9796	mineral	3700	400	180	<4.5	22	0.11	0.060	0.0032	2.0	0.25	0.045	<1.0	120	40	48	15

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Delhi Date: 80/04/01



Location Code: 2001002

UTM: 17T 541100 4724650

Landform: sand plain

Slope: level

Vegetation: grass, pine, oak

Comments: cliff in farmer's field

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9003	surface	0-10	10YR 3/2	90	3.0	7.0	6.6	5.8	1.9	1.3	8.9			600	
9002	mineral	10-15	2.5YR 5/4	87	4.0	9.0	5.7	4.7	0.97	0.94	9.1			900	
9001	mineral	15+	5YR 6/6	92	3.0	5.0	6.5	5.7	0.17	0.29	7.8			780	

SOIL PROFILE INFORMATION (cont'd.)

Site: Delhi

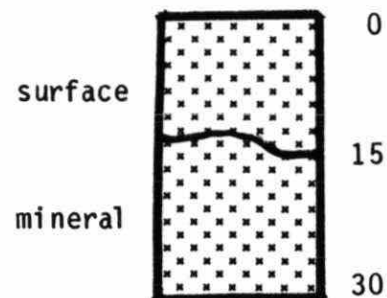
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9003	surface	940	79	51		5.5	0.070	0.090	0.044	0.37	0.13	0.055	<1.0	78	14	6.6	15
9002	mineral	340	110	22	6.0	2.6	0.11	0.15	0.053	0.40	0.17	0.064		57	11	36	5.6
9001	mineral	160	180	8.4		1.0	0.090	0.12	0.012	0.40	0.16	0.020	<1.0	42	11	21	7.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Long Point Provincial Park

Date: 80/04/01



Location Code: 2001003

UTM: 17T 550600 4713650

Landform: beach/shoreline

Slope: gently sloping

Vegetation: grass, pines

Comments: little noticeable change down the profile, 200 ft. from lake

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9005	surface mineral	0-15	10YR 4/1	90	2.0	9.0	8.4	7.8	0.16	0.23	4.9			560	
9004	mineral	15-30	10YR 6/1	92	1.0	7.0	8.7	7.8	0.050	<0.080	3.9			500	

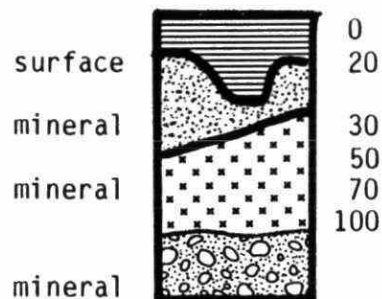
SOIL PROFILE INFORMATION (cont'd.)

Site: Long Point Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9005	surface mineral	290	5.0	8.4		1.5	0.020	0.010	0.0030	0.20	0.016	0.010	21	23	8.5	68	5.9
9004	mineral	160	5.0	4.2		0.86	0.020	0.010	0.0030	0.30	0.016	0.0090	21	18	7.1	49	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Harriston Date: 80/05/15



Location Code: 2001005

UTM: 17T 505200 4865800

Landform: spillway

Slope: nearly level

Vegetation: maple, grass

Comments: gravel pit, dry colors, stoney

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9019	surface	0-20	7.5YR 3/2	26	51	23	7.9	7.4	1.8	1.6	11			430	
9018	mineral	20-50	10YR 4/4	24	55	22	8.0	7.4	0.72	0.79	10			270	
9017	mineral	50-70	10YR 5/3	55	35	10	8.7	8.0	0.070	0.16				210	
9016	mineral	100+	10YR 6/3	75	18	8.0	8.7	7.8	0.13	0.23	5.3			250	
9022	surface	0-20		32	36	32	7.4	6.7	2.1	2.1	13			490	
9021	mineral	20-50		22	60	18	7.4	6.7	0.67	0.59	7.4			390	
9020	mineral	50-70		20	60	19	7.3	6.7	0.35	0.36	6.9			290	
9023	surface	0-5		37	41	22	6.8	6.2	5.0	2.8	14			160	
9024	surface	5-10		38	48	14	6.1	5.2	2.6	1.3	9.8			180	
9025	mineral	60-70		22	52	26	7.5	7.0	0.77	0.62	18			370	

SOIL PROFILE INFORMATION (cont'd.)

Site: Harriston

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9019	surface	1600	440	51		12	0.13	0.060	0.0083	1.0	0.15	0.060	2.0	54	13	10	12
9018	mineral	1000	260	13		7.2	0.28	0.14	0.0066	1.1	0.21	0.040	1.5	45	9.8	11	8.4
9017	mineral	320	66	13		2.2	0.010	<0.002	0.0015	0.59	0.027	0.012	63	21	17	14	5.4
9016	mineral	370	70	17		2.4	0.020	<0.002	0.0019	0.66	0.040	0.020	61	40	19	16	6.2
9022	surface	1600	410	51		12	0.15	0.080	0.0091	0.90	0.16	0.042	<1.0	51	12	9.7	12
9021	mineral	880	210	13		6.1	0.24	0.17	0.0058	0.27	0.20	0.032	<1.0	34	8.5	10	6.8
9020	mineral	980	270	17		5.0	0.14	0.11	0.0054	0.95	0.14	0.050	1.0	34	13	14	7.7
9023	surface	1900	740	43		16	0.35	0.19	0.0047	1.1	0.26	0.011	<1.0	42	10		13
9024	surface	870	330	22	10	7.1	0.42	0.36	0.0017	1.1	0.40	0.005	<1.0	42	11	10	7.6
9025	mineral	1300	530	30		11	0.13	0.11	0.0069	1.2	0.25	0.034	5.0	46	27	24	9.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, C-4

Date: 80/09/26

surface 0

Location Code: 2001109

UTM: 17T 553750 4738550

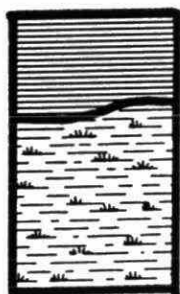
Vegetation: eastern white pine, white birch,
white ash

mineral 15

Landform: clay plain

Comments: depth to watertable 35 cm., mottles
(10YR 5/2) at 15-40 cm. depth

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9887	surface	0-15	10YR 3/2	9.0	46	46	6.3	5.8	6.8	6.2	29			1600	
9888	surface	0-15	10YR 3/2	7.0	36	57	6.3	5.8	6.3	4.6	23			1300	
9889	mineral	15-40	10YR 5/2	3.0	41	56	6.2	5.9	0.97	1.1	18			460	
9890	mineral	15-40	10YR 5/2				6.2	6.0	1.2	1.3	18			570	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, C-4

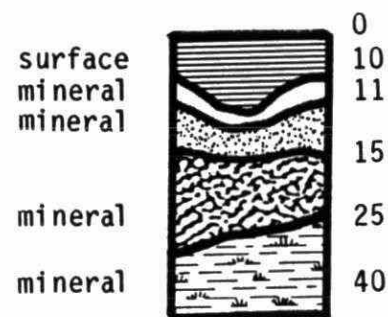
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9887	surface	4200	600	190		26	0.37	0.20	0.036	1.8	0.26	0.15	<1.0	140	24	29	26
9888	surface	4100	580	130		25	0.38	0.19	0.032	1.7	0.26	0.14	<1.0	150	33	30	26
9889	mineral	2800	630	110		19	0.19	0.080	0.0037	1.9	0.20	0.037	<1.0	120	27	38	12
9890	mineral	2500	610	110		18	0.23	0.090	0.0047	1.8	0.19	0.052	<1.0	120	25	36	12

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Ball's Falls Conservation Area

Date: 80/05/27



Location Code: 20010011

UTM: 17T 631300 4776300

Vegetation: sugar maple

Landform: till moraine/limestone plain

Comments: mottles at 40 cm (10YR 5/8), orchards nearby. Bleached horizon at 10-11 cm.

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9070	surface	0-10	7.5YR 2.5/0				4.4	4.0	18	5.7	43			480	
9069	mineral	10-11	5YR 6/1	20	65	15	4.8	3.8	1.2	0.68	10			140	
9068	mineral	11-15	10YR 3/4	17	68	15	4.9	4.0	1.2	1.3	15			340	
9067	mineral	15-25	10YR 6/4	22	61	17	5.3	4.3	0.56	0.38	14			230	
9066	mineral	25-40	5YR 6/3	34	54	22	5.4	4.6	0.15	0.33	24			330	
9071	surface	0-10		15	61	24	4.6	4.3	12	5.0	49			530	
9072	mineral	15-25		18	65	17	5.0	4.3	1.0	0.69	14			270	
9073	mineral	25-40		24	55	21	5.2	4.3	0.37	0.39	17			210	

SOIL PROFILE INFORMATION (cont'd.)

Site: Ball's Falls Conservation Area

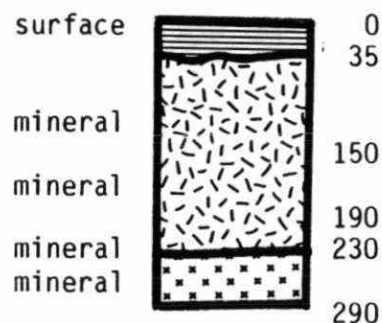
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9070	surface	3300	560	160	190	23	0.34	0.18	0.016	0.61	0.19	0.020		73	34	20	57
9069	mineral	470	130	54	330	6.8	0.11	0.050	0.00040	0.28	0.053	0.0020		15	23	2.3	<3.0
9068	mineral	390	100	53	320	6.1	0.49	0.20	0.00090	1.0	0.21	0.0030		33	31	6.4	<3.0
9067	mineral	200	46	47	210	3.6	0.27	0.13	<0.00010	0.84	0.13	0.0080		50	25	17	6.9
9066	mineral	470	100	42		3.3	0.18	0.060	0.0012	1.4	0.12	0.020		58	39	21	10
9071	surface	2300	420	180	49	16	0.40	0.16	0.015	0.73	0.17	0.018		63	54	17	38
9072	mineral	170	41	42	240	3.7	0.31	0.16	0.0012	0.82	0.16	0.0090		55	52	18	8.8
9073	mineral	380	86	37	180	4.4	0.19	0.080	0.00080	1.1	0.12	0.016		55	42	20	8.7

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nelles Beach

Date: 80/05/28



Location Code: 2001012

UTM: 17T 618550 4783700

Vegetation: grass, orchard

Landform: sand plain/shale plain

Comments: on 50 m cliff by Lake Ontario,
previously managed

Slope: very strong slopes

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9078	surface	0-35	10YR 5/4	19	65	16	6.8	6.2	1.2	1.4	13			860	
9081	surface	0-35	10YR 5/4	16	66	18	6.8	6.2	1.3	1.3	15			860	
9080	mineral	35-150	5YR 4/4	19	65	16	5.6	4.9	0.11	0.30	38			690	
9077	mineral	35-150	5YR 4/4	23	68	9.0	5.7	5.0	0.11	0.25	51			980	
9076	mineral	150-190	5YR 4/4	19	75	6.0	7.1	6.5	0.030	0.18	18			800	
9079	mineral	150-190	5YR 4/4	29	61	10	7.0	6.3	0.030	0.26	20			770	
9075	mineral	190-230	7.5YR 4/4	80	13	6.0	7.8	6.7	0.070	<0.14	9.1			720	
9074	mineral	230-290	5YR 4/1				8.3	7.7	0.23	0.38	79			800	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nelles Beach

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9078	surface	790	180	160		5.8	0.12	0.050	0.014	0.73	0.10	0.034	<1.0	70	36	15	30
9081	surface	1000	200	150		7.2	0.12	0.040	0.016	0.69	0.10	0.034	<1.0	67	33	15	31
9080	mineral	590	86	17	8.0	3.8	0.080	0.020	0.0019	0.93	0.060	0.061		45	31	18	4.0
9077	mineral	620	91	22	5.0	3.9	0.10	0.030	0.0024	1.0	0.090	0.064		44	31	18	4.5
9076	mineral	750	150	10		5.0	0.010	<0.0020	0.00040	0.79	0.060	0.058	1.0	40	22	17	4.0
9079	mineral	780	170	10		5.3	0.020	0.010	0.0011	0.88	0.060	0.067	1.0	42	24	16	4.1
9075	mineral	500	81	10		3.1	0.020	0.010	0.00070	0.76	0.060	0.070	1.5	38	38	14	3.1
9074	mineral	790	120	63		5.0	0.020	<0.0020	0.0069	0.45	0.22	0.025	18	61	54	25	7.5

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Chippawa Creek Conservation Area	Date: 80/05/28
surface	0	Location Code: 2001013	
mineral	20	UTM: 17T 620850 4761300	Vegetation: maple, oak, grass
mineral	30	Landform: clay plain	Comments: many coarse mottles (7.5YR 5/8), water seeping in at 60 cm
mineral	60	Slope: level	



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9085	surface	0-20	10YR 4/2	30	46	24	5.8	5.1	5.4	3.1	31			380	
9084	surface mineral	20-30	2.5YR 7/2	14	42	44	5.6	4.7	0.92	0.42	13			70	
9083	mineral	30-60	7.5YR 5/0	29	49	22	5.9	5.1	0.33	0.41	24			80	
9082	mineral	60+	2.5YR 6/0	9.0	36	55	8.4	7.9	0.29	0.59	32			670	
9089	mineral	0-20	10YR 4/2	29	47	24	5.6	5.0	4.6	2.7	29			320	
9088	mineral	20-30	2.5YR 7/2	31	49	20	5.6	4.7	0.96	0.49	13			100	
9087	mineral	30-60	7.5YR 5/0	24	41	35	5.9	5.1	0.35	0.41	35			150	
9086	mineral	60+	2.5YR 6/0	12	37	52	8.2	7.9	0.33	0.52	34			840	

SOIL PROFILE INFORMATION (cont'd.)

Site: Chippawa Creek Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9085	surface	1900	300	243	7.0	13	0.26	0.13	0.0018	0.42	0.14	0.0080	<1.0	54	22	14	20
9084	surface mineral	340	120	42	62	3.4	0.080	0.060	0.00070	0.26	0.060	0.0020		20	16	6.1	5.7
9083	mineral	870	390	22	10	7.6	0.040	0.020	0.0013	0.37	0.050	0.0020		25	13	9.6	6.5
9082	mineral	3100	1000	21		23	0.010	0.010	0.0070	1.6	0.12	0.068	11	66	46	37	11
9089	mineral	1600	270	210	15	11	0.23	0.14	0.0046	0.43	0.14	0.0060		50	48	12	17
9088	mineral	340	120	53	62	3.4	0.080	0.070	0.00040	0.30	0.064	0.00090		22	15	6.8	6.8
9087	mineral	1300	81	32	14	7.2	0.090	0.030	0.0025	2.4	0.18	0.0090		41	28	18	9.7
9086	mineral	3000	840	21		22	0.010	0.010	0.0059	1.5	0.12	0.054	6.0	62	36	34	10

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Christie Conservation Area

Date: 80/06/11

surface

surface/
mineral

mineral



0

20

40

60

70

Location Code: 2001021

UTM: 17T 579850 4792400

Landform: sand plain/fluvial

Slope: nearly level

Vegetation: young maple, poplar, oak

Comments: near fish pond, Spencer Creek
flood plain

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9162	surface	0-20	10YR 3/2	38	36	26	6.9	6.6	3.1	2.6	14			950	
9163	surface	0-20	10YR 3/2	41	37	23	7.2	6.6	3.2	2.9	15			1000	
9160	surface mineral	20-40	10YR 3/3	41	46	12	6.3	5.5	1.4	1.3	12			830	
9161	surface mineral	20-40	10YR 3/3	42	45	13	5.8	5.0	1.3	1.1	12			760	
9158	surface mineral	40-60	10YR 3/3	44	44	13	6.2	5.3	1.4	1.2	14			870	
9159	surface mineral	40-60	10YR 3/3	42	45	13	5.8	4.9	1.6	1.2	14			900	
9156	mineral	60-70	7.5YR 5/6	47	45	8.0	6.2	5.5	0.53	0.55	14			630	
9157	mineral	60-70	7.5YR 5/6	43	49	8.0	6.2	5.4	0.45	0.45	18			510	

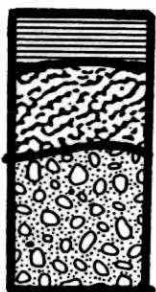
SOIL PROFILE INFORMATION (cont'd.)

Site: Christie Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9162	surface	2000	410	130		14	0.10	0.040	0.025	1.0	0.17	0.073	<1.0	110	29	14	42
9163	surface	2000	410	140		14	0.10	0.040	0.027	1.1	0.18	0.079	<1.0	140	37	14	46
9160	surface mineral	900	220	68	<2.3	6.5	0.12	0.080	0.0086	1.0	0.24	0.054	<1.0	62	24	11	12
9161	surface mineral	600	160	79	3.0	4.5	0.12	0.070	0.011	1.1	0.24	0.079		62	29	11	14
9158	surface mineral	740	190	42	<2.3	5.3	0.17	0.090	0.0079	1.1	0.26	0.053	<1.0	58	24	11	10
9159	surface mineral	680	160	42	<2.3	4.8	0.18	0.11	0.0093	1.1	0.28	0.056		55	26	10	9.8
9156	mineral	270	56	27	<2.3	1.9	0.10	0.10	0.0019	0.92	0.27	0.024	<1.0	45	27	13	4.5
9157	mineral	200	56	32	<2.3	1.6	0.10	0.070	0.0026	1.1	0.30	0.039	<1.0	51	25	11	5.1

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Guelph Lake Conservation Area	Date: 80/06/12
surface	0	Location Code: 2001022	
mineral	14	UTM: 17T 561000 4827250	Vegetation: grasses
	20	Landform: till plain	Comments: many stones, all sizes at 20-70 cm depth
mineral	70	Slope: gently sloping	



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9168	surface	0-14	10YR 3/2	42	34	24	7.9	7.4	2.7	2.8	10			960	
9169	surface	0-14	10YR 3/2	42	34	25	7.8	7.4	2.7	2.5	8.6			850	
9166	mineral	14-20	10YR 4/3	45	33	22	8.0	7.4	1.6	1.8	8.4			730	
9167	mineral	14-20	10YR 4/3	44	29	26	7.9	7.4	1.4	1.3	9.7			620	
9164	mineral	20-70	10YR 5/3	72	10	19	8.3	7.7	0.20	0.20	1.5			270	
9165	mineral	20-70	10YR 5/3	84	4.0	12	8.4	7.8	0.29	<0.15	1.3			310	

SOIL PROFILE INFORMATION (cont'd.)

Site: Guelph Lake Conservation Area

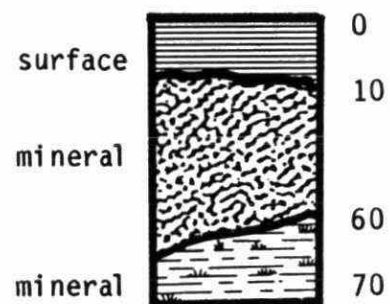
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9168	surface	2200	540	240		16	0.070	0.030	0.012	1.1	0.16	0.10	3.0	140	28	12	31
9169	surface	2200	510	220		16	0.060	0.030	0.012	1.1	0.15	0.10	3.0	140	27	12	26
9166	mineral	1600	410	32		12	0.090	0.030	0.0084	1.0	0.15	0.092	5.0	120	18	11	27
9167	mineral	1800	510	43		13	0.090	0.030	0.0071	1.2	0.16	0.095	3.0	180	22	15	73
9164	mineral	400	75	16		2.6	0.010	<0.0020	0.0026	0.33	0.030	0.024	59	86	29	5.5	16
9165	mineral	340	75	11		2.3	0.010	<0.0020	0.0025	0.26	0.020	0.017	65	75	22	5.1	15

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Elora Gorge Conservation Area

Date: 80/06/12



Location Code: 2001023

UTM: 17T 544800 4835450

Vegetation: deciduous forest

Landform: till plain

Comments: many fine mottles at 60-70 cm (10YR 5/6)

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9174	surface	0-10	10YR 3/2	27	48	26	7.6	7.0	3.8	3.4	14			590	
9175	surface	0-10	10YR 3/2	25	50	25	7.4	7.0	4.9	3.8	14			620	
9172	mineral	10-60	10YR 5/4	32	50	19	7.9	7.3	0.39	0.75	5.2			620	
9173	mineral	10-60	10YR 5/4	30	50	20	7.8	7.3	0.49	0.58	6.4			670	
9170	mineral	60-70	10YR 6/1	41	44	14	8.1	7.4	0.080	<0.15	5.3			990	
9171	mineral	60-70	10YR 6/1	49	36	15	8.1	7.4		<0.14	4.1			910	

SOIL PROFILE INFORMATION (cont'd.)

Site: Elora Gorge Conservation Area

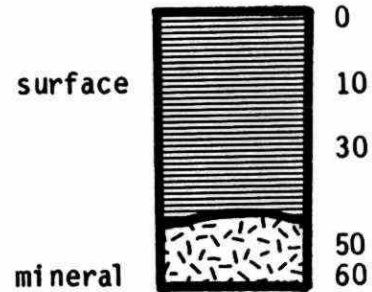
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9174	surface	2900	720	42		20	0.14	0.11	0.021	1.1	0.16	0.054	1.0	150	43	13	14
9175	surface	3200	780	64		22	0.15	0.11	0.022	0.95	0.15	0.045	1.0	130	34	11	16
9172	mineral	1200	390	27		9.0	0.050	0.010	0.0024	0.97	0.13	0.063	1.0	87	33	12	6.4
9173	mineral	1300	460	27		10	0.070	0.020	0.0024	1.1	0.16	0.076		99	37	13	5.7
9170	mineral	900	280	27		6.0	0.030	0.010	0.0011	1.0	0.13	0.050	1.0	38	40	9.9	4.5
9171	mineral	800	250	27		6.0	0.020	<0.0020	0.00070	0.92	0.11	0.044	1.0	33	25	9.6	4.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Laurel Creek Conservation Area

Date: 80/06/12



Location Code: 2001024

UTM: 17T 534700 4814950

Vegetation: maple forest

Landform: spillway

Comments: little ground vegetation,
near A.P.I.O.S. precipitation
collector

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9182	surface	0-10	7.5YR 4/2	44	31	25	6.6	5.9	2.6	0.41	12			620	
9183	surface	0-10	7.5YR 4/2	43	34	23	6.5	5.9	2.9	1.5	14			370	
9180	surface	10-30	7.5YR 4/2	44	33	23	6.9	6.3	1.2	1.1	7.6			420	
9181	surface	10-30	7.5YR 4/2	43	33	24	7.0	6.4	1.1	1.1	7.5			410	
9178	surface	30-50	7.5YR 3/2	49	30	21	7.0	6.1	0.86	0.84	6.4			360	
9179	surface	30-50	7.5YR 3/2	50	26	24	7.0	6.2	1.0	0.98	6.7			350	
9176	mineral	50-60	10YR 5/3	60	17	23	6.7	5.9	0.19	0.28	4.2			320	
9177	mineral	50-60	10YR 5/3				6.6	5.6	0.23	0.34	5.2			350	

SOIL PROFILE INFORMATION (cont'd.)

Site: Laurel Creek Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9182	surface	1800	340	110		12	0.090	0.040	0.026	0.80	0.10	0.053	<1.0	76	28	12	14
9183	surface	1800	350	110		11	0.080	0.040	0.026	0.82	0.10	0.056	<1.0	68	20	11	13
9180	surface	1300	300	63		9.2	0.080	0.040	0.018	0.72	0.19	0.047	<1.0	65	24	10	8.6
9181	surface	1200	280	51		8.6	0.080	0.040	0.014	0.76	0.10	0.051	<1.0	68	27	11	8.2
9178	surface	940	220	25		6.5	0.12	0.050	0.0062	0.71	0.12	0.056	<1.0	63	29	8.4	5.9
9179	surface	940	220	21		6.4	0.14	0.070	0.0072	0.70	0.12	0.055	<1.0	66	31	8.6	5.9
9176	mineral	280	93	16		2.1	0.060	0.030	0.0028	0.47	0.060	0.039	<1.0	42	23	7.7	4.4
9177	mineral	280	98	16		2.2	0.10	0.060	0.0049	0.52	0.090	0.042	<1.0	46	27	8.0	5.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

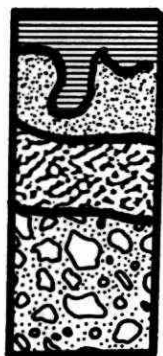
Site: Orangeville Reservoir Conservation Area Date: 80/07/02

surface

mineral

mineral

mineral



0

20

40

60

100

Location Code: 2001042

UTM: 17T 574100 4864750

Landform: spillway

Slope: nearly level

Vegetation: maple, grasses

Comments: limestone rocks in pit,
many stones and rocks

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9329	surface	0-20	10YR 4/2	34	42	24	6.6	5.9	4.4	2.4	11			790	
9330	surface	0-20	10YR 4/2	37	45	18	6.5	5.8	4.2	2.0	10			740	
9327	mineral	20-40	10YR 4/3	45	34	20	6.4	5.3	1.0	0.48	3.9			570	
9328	mineral	20-40	10YR 4/3	45	34	20	6.4	5.7	1.1	0.79	5.1			750	
9325	mineral	40-60	10YR 5/4	74	19	7.0	6.9	5.8	0.37	<0.14	1.3			520	
9326	mineral	40-60	10YR 5/4	80	15	6.0	6.4	5.4	0.65	0.29	1.6			630	
9323	mineral	60-100	7.5YR 4/4	81	10	9.0	7.2	6.5	0.53	0.32	2.1			420	
9324	mineral	60-100	7.5YR 4/4	81	10	10	7.8	7.4	0.40	<0.11	1.5			550	

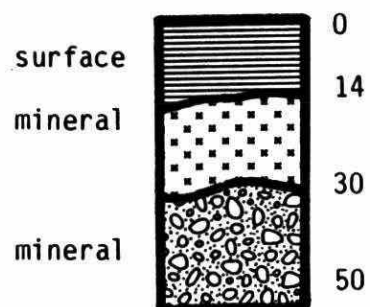
SOIL PROFILE INFORMATION (cont'd.)

Site: Orangeville Reservoir

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9329	surface	2300	450	53		15	0.30	0.17	0.016	0.81	0.30	0.037	<1.0	62	15	5.4	8.0
9330	surface	2100	310	61		13	0.28	0.16	0.012	0.86	0.31	0.032	<1.0	62	15	5.9	8.7
9327	surface mineral	760	120	95	<4.5	5.0	0.22	0.22	0.0056	0.70	0.26	0.018	<1.0	55	13	8.9	7.5
9328	surface mineral	1100	120	56		6.8	0.23	0.15	0.0067	1.0	0.32	0.032	<1.0	52	16	13	7.4
9325	mineral	330	63	19		2.2	0.080	0.080	0.0036	0.41	0.12	0.013	<1.0	23	16	53	4.8
9326	mineral	410	57	12	3.2	2.6	0.080	0.11	0.0054	0.44	0.18	0.019	<1.0	25	16	9.9	3.1
9323	mineral	660	72	27		3.9	0.070	0.050	0.0075	0.35	0.13	0.027	1.0	22	13	6.0	4.0
9324	mineral	720	53	27		4.1	0.040	0.040	0.0045	0.42	0.071	0.021	10	22	28	62	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Waterford Lakes Conservation Area Date: 80/07/17



Location Code: 2001058

UTM: 17T 555650 4753910

Vegetation: balsam fir, poplar, grasses,
wild grape

Landform: moraine

Comments: very stoney at 30-60 cm

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9467	surface	0-14	10YR 4/1	60	20	20	7.8	7.4	3.0	2.4	6.9			1000	
9468	surface	0-14	10YR 4/1	55	22	23	7.8	7.4	3.2	2.6	7.6			1000	
9465	mineral	14-30	10YR 6/4	70	15	16	8.2	7.6	0.43	0.38	3.7			770	
9466	mineral	14-30	10YR 6/4	71	13	16	8.4	7.8	0.39	0.26	8.3			720	
9463	mineral	30-50	10YR 5/3	75	14	11	8.4	7.8	0.25	0.24	11			400	
9464	mineral	30-50	10YR 5/3	66	20	14	8.2	7.6	0.43	0.39	4.4			800	

SOIL PROFILE INFORMATION (cont'd.)

Site: Waterford Lakes Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9467	surface	2000	180	140		12	0.030	0.010	0.026	0.67	0.080	0.049	8.0	69	22	8.6	18
9468	surface	2100	190	330		13	0.030	<0.0020	0.031	0.70	0.090	0.052	8.0	70	26	8.5	21
9465	mineral	830	60	32		4.7	0.050	0.020	0.0092	0.55	0.070	0.049	10	43	18	43	6.2
9466	mineral	830	69	35		4.9	0.020	0.010	0.0063	0.76	0.070	0.072	30	79	40	30	13
9463	mineral	700	58	30		4.0	0.020	0.010	0.0060	0.69	0.070	0.050	31	72	29	34	11
9464	mineral	780	67	30		4.5	0.050	0.030	0.0085	0.40	0.050	0.035	11	44	21	27	6.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Norfolk Conservation Area

Date: 80/07/17

surface



0

30

mineral

45

mineral

60

Location Code: 2001059

UTM: 17T 559950 4732900

Vegetation: sugar maple, red oak,
eastern cottonwood, ironwood

Landform: clay plain

Comments:

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9475	surface	0-30	10YR 3/3	25	44	31	6.2	5.5	3.1	2.4	17			750	
9476	surface	0-30	10YR 3/3	32	43	26	6.2	5.5	2.8	2.2	14			700	
9473	mineral	30-35	10YR 5/4	33	43	25	6.3	5.5	1.3	1.0	13			510	
9474	mineral	30-35	10YR 5/4	29	53	18	6.2	5.4	1.6	1.2	15			440	
9471	mineral	35-45	10YR 5/4	25	51	24	6.5	5.8	0.61	0.48	11			450	
9472	mineral	35-45	10YR 5/4				6.5	5.7	0.70	0.55	14			420	
9469	mineral	45-60	10YR 4/3	17	36	47	6.7	6.2	0.32	0.48	17			780	
9470	mineral	45-60	10YR 4/3	12	47	41	7.0	6.3	0.43	0.53	18			800	

SOIL PROFILE INFORMATION (cont'd.)

Site: Norfolk Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9475	surface	1500	180	140		9.3	0.27	0.13	0.016	0.77	0.16	0.024	<1.0	62	17	13	11
9476	surface	1300	160	120		8.2	0.26	0.12	0.013	0.69	0.15	0.021	<1.0	58	21	12	8.7
9473	mineral	910	110	22		5.5	0.24	0.12	0.0067	0.79	0.16	0.023	<1.0	54	18	13	4.4
9474	mineral	1100	140	41	<2.3	6.3	0.25	0.13	0.0081	0.78	0.16	0.022	<1.0	54	13	12	3.8
9471	mineral	1000	130	25		6.2	0.17	0.070	0.0042	0.97	0.14	0.037	<1.0	60	28	17	6.1
9472	mineral	800	100	20		4.8	0.19	0.090	0.0048	0.81	0.13	0.027	<1.0	53	16	14	3.4
9469	mineral	2200	280	35		13	0.080	0.020	0.0024	1.4	0.17	0.061	<1.0	83	36	30	9.3
9470	mineral	2300	280	38		14	0.070	0.020	0.0022	1.5	0.17	0.066	<1.0	76	34	28	8.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Selkirk Provincial Park

surface 0 Location Code: 2001060

mineral 10 UTM: 17T 585200 4740900

mineral 20 Landform: clay plain

 40 Slope: simple, class 1, level

Date: 80/07/17

Vegetation: white pine, red oak, grasses

Comments: bleached horizon at 10-20 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9481	surface	0-10	10YR 4/1	15	25	60	6.4	5.9	4.7	3.2	14			750	
9482	surface	0-10	10YR 4/1	12	39	48	6.3	5.8	4.5	5.2	14			820	
9479	mineral	10-20	10YR 7/3	4.0	54	43	5.0	4.2	0.84	0.71	7.1			460	
9480	mineral	10-20	10YR 7/3	4.0	51	44	5.0	4.2	0.70	0.72	6.9			440	
9477	mineral	20-40	5YR 4/4	2.0	21	77	4.8	4.4	0.69	0.84	14			610	
9478	mineral	20-40	5YR 4/4	1.0	22	77	4.8	4.3	0.47	0.76	14			640	

SOIL PROFILE INFORMATION (cont'd.)

Site: Selkirk Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9481	surface	2300	290	160		14	0.19	0.080	0.75	0.95	0.16	0.10	<1.0	100	19	20	32
9482	surface	2300	260	150		14	0.17	0.080	0.066	0.93	0.16	0.10	<1.0	100	25	21	36
9479	mineral	670	120	73	330	7.8	0.20	0.12	0.0079	1.1	0.15	0.036		90	30	26	8.7
9480	mineral	780	130	59	380	8.9	0.19	0.13	0.0076	1.2	0.18	0.038		91	25	28	6.9
9477	mineral	2400	370	110	310	18	0.18	0.11	0.0050	1.8	0.25	0.044		110	50	49	9.9
9478	mineral	2000	340	130	390	17	0.16	0.12	0.0050	1.9	0.25	0.047		110	45	48	8.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: La Fortune Conservation Area

Date: 80/07/17

surface

mineral



Location Code: 2001061

UTM: 17T 581450 4772150

Vegetation: red maple, scotch pine,
dogwood, white ash

Landform: clay plain

Comments:

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9487	surface	0-12	10YR 3/2	3.0	48	49	6.7	6.3	5.3	3.5	20			910	
9488	surface	0-12	10YR 3/2	3.0	49	48	6.7	6.3	5.6	3.6	22			950	
9485	mineral	12-20	10YR 4/3	2.0	54	44	6.4	5.7	0.51	0.74	18			530	
9486	mineral	12-20	10YR 4/3	2.0	54	44	6.4	6.0	0.70	0.80	8.2			520	
9483	mineral	20-40	10YR 5/4	2.0	48	50	6.6	6.2	0.43	0.53	14			730	
9484	mineral	20-40	10YR 5/4	1.0	47	52	6.6	5.9	0.29	0.50	14			680	

SOIL PROFILE INFORMATION (cont'd.)

Site: La Fortune Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9487	surface	3700	450	210		22	0.19	0.060	0.065	1.5	0.18	0.14	<1.0	130	48	37	23
9488	surface	3800	460	190		23	0.25	0.060	0.067	1.5	0.19	0.15	<1.0	130	42	36	26
9485	mineral	1900	240	100		12	0.11	0.040	0.0054	1.7	0.17	0.067	<1.0	92	53	41	6.7
9486	mineral	2000	280	130		12	0.13	0.040	0.015	1.6	0.16	0.072	<1.0	96	59	38	7.8
9483	mineral	2900	290	78		17	0.090	0.020	0.0065	1.7	0.16	0.066	<1.0	96	43	42	7.1
9484	mineral	2400	280	95		14	0.080	0.020	0.0045	1.7	0.16	0.070	<1.0	96	43	42	5.4

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, D-2

Date: 80/09/08

surface 0

Location Code: 2001094

10

UTM: 17T 583300 4743900

Vegetation: eastern white pine, white birch,
white ash

25

Landform: clay plain

Comments: faint horizonation

surface/
mineral 40

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9787	surface	0-10	2.5Y 5/2	5.0	29	66	6.4	6.0	3.6	2.6	20			590	
9788	surface	0-10	2.5Y 5/2	6.0	29	65	6.6	6.2	3.6	3.5	29			710	
9785	surface	10-25	7.5YR 4/2	4.0	30	66	6.5	5.9	2.8	2.4	15			600	
9786	surface	10-25	7.5YR 4/2	4.0	31	64	6.4	5.9	2.8	2.3	16			640	
9783	surface mineral	25-40	7.5YR 3/2	2.0	19	80	6.5	6.1	1.1	1.1	16			390	
9784	surface mineral	25-40	7.5YR 3/2	1.0	17	82	6.6	6.2	1.1	1.3	19			390	

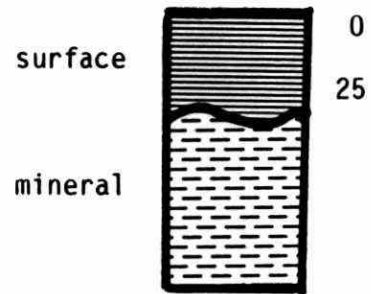
SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, D-2

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9787	surface	3100	500	200		20	0.14	0.080	0.016	1.8	0.24	0.11	<1.0	120	29	36	22
9788	surface	3300	540	260		21	0.14	0.080	0.018	1.7	0.22	0.11	<1.0	110	26	35	22
9785	surface	3300	510	110		21	0.18	0.10	0.022	1.7	0.23	0.10		110	25	36	19
9786	surface	3200	520	130		20	0.18	0.10	0.025	1.8	0.23	0.11	<1.0	110	30	39	21
9783	surface mineral	3300	760	69		23	0.18	0.090	0.0087	1.8	0.24	0.055	<1.0	110	33	47	13
9784	surface mineral	3400	720	64		23	0.15	0.070	0.0099	1.8	0.25	0.063	<1.0	110	34	49	14

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Nanticoke Seedling Plot, E-4 Date: 80/09/08



surface 0
 25

mineral

Location Code: 2001097

UTM: 17T 602500 4745150

Vegetation: eastern white pine, white birch,
white ash

Landform: clay plain

Slope: level

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9819	surface	0-10	10YR 5/2	11	40	49	6.7	6.2	3.2	2.7	21			590	
9820	surface	0-10	10YR 5/2	10	40	50	6.6	6.1	2.8	2.2	13			570	
9817	surface	10-25	10YR 5/2	10	35	55	6.4	5.9	2.2	1.8	11			490	
9818	surface	10-25	10YR 5/2	11	39	50	6.5	5.9	2.6	2.1	11			610	
9815	mineral	25+	7.5YR 5/2	4.0	29	67	6.0	5.6	0.82	1.1	12			440	
9816	mineral	25+	7.5YR 5/2	4.0	26	70	6.1	5.6	0.80	0.99	12			430	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, E-4

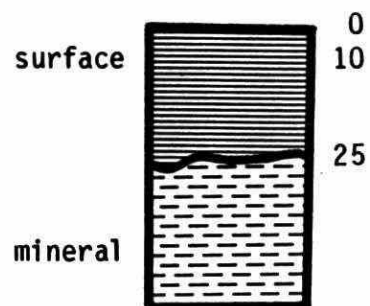
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb	
9819	surface	2700	640	180		19	0.18	0.070	0.83	1.7	0.22	0.11	<1.0	110	23	31	35	
9820	surface	2500	600	140		18	0.17	0.070	0.23	1.5	0.22	0.082	<1.0	110	23	31	27	
9817	surface	2500	580	92		17	0.20	0.070	0.24	1.7	0.23	0.11	<1.0	110	24	34	30	
9818	surface	2400	570	100		17	0.20	0.070	0.24	1.7	0.23	0.10	<1.0	110	20	32	29	
9815	mineral	2800	730	87		20	0.18	0.070	0.0071	1.4	0.22	0.040	<1.0	110	29	45	17	
9816	mineral	2800	730	92		20	0.19	0.060	0.0072	1.7	0.25	0.070	<1.0	140	31	45	20	

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, E-3

Date: 80/09/08



Location Code: 2001098

UTM: 17T 590950 4742800

Vegetation: eastern white pine, white birch
white ash

Landform: clay plain

Slope: level

Comments: faint mottling in subsurface
mineral horizons, area previously
ploughed

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9813	surface	0-10	10YR 5/2	14	38	47	6.1	5.4	3.1	2.8	17			760	
9814	surface	0-10	10YR 5/2	17	38	45	6.0	5.4	2.3	2.3	12			790	
9811	surface	10-25	10YR 5/2	15	43	42	6.0	5.4	2.1	1.2	11			620	
9812	surface	10-25	10YR 5/2	16	43	41	6.1	5.5	2.2	2.1	12			680	
9809	mineral	25+	10YR 4/4	6.0	32	62	6.1	5.6	0.59	0.80	15			550	
9810	mineral	25+	10YR 4/4	8.0	36	56	5.8	5.4	0.61	0.72	15			410	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, E-3

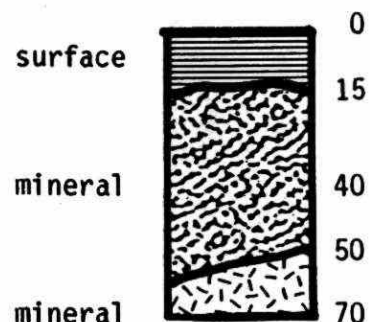
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9813	surface	2600	400	200	<4.5	17	0.30	0.11	0.041	1.7	0.23	0.10	<1.0	110	19	25	28
9814	surface	2200	390	200	<4.5	15	0.30	0.10	0.036	1.6	0.23	0.10	<1.0	110	18	23	24
9811	surface	2400	380	130	<4.5	15	0.30	0.14	0.033	1.8	0.25	0.11	<1.0	110	21	25	25
9812	surface	2100	380	110		14	0.28	0.11	0.030	1.8	0.25	0.12	<1.0	110	25	24	28
9809	mineral	2600	630	77		18	0.14	0.070	0.0055	1.5	0.22	0.053		100	32	39	13
9810	mineral	1900	280	120	6.0	12	0.16	0.070	0.0056	1.6	0.22	0.053	<1.0	98	27	35	13

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, B-4

Date: 80/08/11



Location Code: 2001099

UTM: 17T 574700 4740550

Vegetation: eastern white pine, white birch
white ash

Landform: sand plain

Comments: no stones, previously ploughed

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9827	surface	0-15	10YR 3/2	83	9.0	8.0	6.1	5.2	3.9	0.94	11			440	
9828	surface	0-15	10YR 3/2	83	9.0	8.0	6.0	5.1	3.6	0.75	14			420	
9825	mineral	15-40	10YR 5/8	94	4.0	1.0	6.6	5.6	1.6	0.36	12			210	
9826	mineral	15-40	10YR 5/8	96	2.0	1.0	6.5	5.6	1.6	0.30	19			200	
9823	mineral	40-50	10YR 5/8	97	2.0	1.0	6.5	5.5	0.82	0.28	5.7			240	
9824	mineral	40-50	10YR 5/8	97	2.0	1.0	6.5	5.5	0.90	0.21	7.8			190	
9821	mineral	50-70	10YR 7/8	95	2.0	3.0	6.5	5.5	0.17	<0.14	3.7			200	
9822	mineral	50-70	10YR 7/8	88	1.0	11	6.4	5.4	0.37	0.17	5.2			240	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, B-4

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9827	surface	340	18	54	8.0	2.0	0.16	0.39	0.0025	0.86	0.59	0.0090	<1.0	52	9	6.9	15
9828	surface	340	27	65	11	2.2	0.13	0.30	0.0021	0.86	0.61	0.0090	<1.0	52	18	5.9	16
9825	mineral	190	11	36		1.1	0.080	0.27	0.00040	0.76	0.58	0.0080	<1.0	48	18	12	9.6
9826	mineral	200	9.0	36		1.2	0.080	0.25	0.00040	0.82	0.61	0.0080	<1.0	50	20	12	12
9823	mineral	110	11	26		0.71	0.050	0.21	0.00040	0.47	0.34	0.0080	<1.0	29	10	8.6	6.6
9824	mineral	130	9.0	24		0.76	0.040	0.20	0.00040	0.49	0.32	0.0070	<1.0	37	14	11	10
9821	mineral	69	50	27	<2.3	0.82	0.040	0.10	0.010	0.25	0.14	0.080	<1.0	14	12	3.2	<3.0
9822	mineral	69	9.0	32	<2.3	<0.50	0.070	0.17	0.018	0.42	0.24	0.020	<1.0	24	12	7.3	5.5

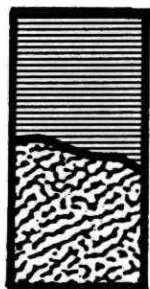
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, B-3

Date: 80/09/11

surface



0
10

Location Code: 2001100

UTM: 17T 566000 4749850

Vegetation: eastern white pine, white birch
white ash, grass

mineral

30
40

Landform: clay plain

Comments: evidence of previous ploughing

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9833	surface	0-10	10YR 3/2	8.0	64	28	7.2	6.8	2.5	1.9	11			630	
9834	surface	0-10	10YR 3/2	8.0	64	28	7.2	6.7	2.6	2.1	15			680	
9831	surface	10-30	10YR 3/3	7.0	63	30	7.3	6.8	2.1	1.6	9.6			680	
9832	surface	10-30	10YR 3/3	7.0	65	28	7.2	6.7	2.4	1.7	12			620	
9829	mineral	30-40	10YR 5/4	3.0	64	33	7.2	6.7	0.96	0.85	8.4			780	
9830	mineral	30-40	10YR 5/4	3.0	62	35	7.3	6.8	0.73	0.72	9.2			820	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, B-3

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb	
9833	surface	3200	310	96		19	0.060	0.050	0.019	1.3	0.18	0.091	<1.0	88	30	24	17	
9834	surface	3400	350	120		20	0.060	0.040	0.021	1.2	0.16	0.087	<1.0	95	32	25	16	
9831	surface	3100	200	48		17	0.070	0.050	0.014	1.3	0.18	0.096	<1.0	93	39	24	13	
9832	surface	3100	240	48		18	0.070	0.050	0.018	1.4	0.18	0.090	<1.0	88	29	23	14	
9829	mineral	2600	190	51		14	0.080	0.050	0.0056	1.3	0.19	0.064	<1.0	88	35	30	10	
9830	mineral	2000	190	58		13	0.070	0.040	0.0053	1.4	0.18	0.066	<1.0	90	44	32	11	

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Nanticoke Seedling Plot, B-2 Date: 80/09/11

surface 0 Location Code: 2001101

 10 UTM: 17T 5700800 4747400 Vegetation: eastern white pine, white birch

mineral 20 Landform: clay plain white ash

 Slope: level Comments: faint mottles in subsurface mineral horizon, mottle colour 10YR 5/8, evidence of previous ploughing

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9839	surface	0-10	10YR 4/3	30	44	26	7.1	6.5	2.2	1.7	13			510	
9840	surface	0-10	10YR 4/3	30	43	27	7.1	6.7	2.7	1.8	17			540	
9837	surface	10-20	10YR 5/3	31	42	28	7.1	6.6	1.7	1.2	8.5			450	
9838	surface	10-20	10YR 5/3	30	42	28	7.1	6.6	1.8	1.3	9.0			490	
9835	mineral	20+	10YR 4/3	15	35	49	7.0	6.6	0.45	0.73	13			500	
9836	mineral	20+	10YR 4/3				7.1	6.6	0.29	0.75	9.7			470	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, B-2

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9839	surface	2100	240	100		12	0.070	0.020	0.0055	1.1	0.17	0.030	<1.0	82	20	17	16
9840	surface	2200	240	140		13	0.070	0.020	0.0066	1.1	0.16	0.027	<1.0	87	17	18	19
9837	surface	2100	230	48		12	0.090	0.030	0.0054	1.2	0.17	0.039	<1.0	85	23	17	14
9838	surface	2200	220	58		13	0.070	0.020	0.0043	1.0	0.16	0.026	<1.0	86	30	16	14
9835	mineral	2600	42	47		13	0.10	0.040	0.0035	1.6	0.19	0.054	<1.0	120	31	33	12
9836	mineral	1700	340	41		12	0.12	0.050	0.0030	1.5	0.19	0.067	<1.0	130	22	24	11

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, D-4

Date: 80/09/12

surface

Location Code: 2001103

UTM: 17T 596300 4755200

Vegetation: eastern white pine, white birch,
white ash

Landform: clay plain

Slope: level

Comments: many, medium mottles (5YR 6/8) in
subsurface mineral horizon,
faint mottles (10YR 6/8) in surface
horizon. Previously ploughed.

mineral

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9857	surface	0-12	10YR 4/3	8.0	51	41	5.3	4.7	5.3	4.3	49			930	
9858	surface	0-12	10YR 4/3	9.0	50	41	5.3	4.6	5.1	3.7	47			850	
9855	surface	12-20	10YR 4/1	7.0	53	40	5.3	4.6	2.8	2.2	26			670	
9856	surface	12-20	10YR 4/1	9.0	51	40	5.4	4.6	4.2	2.9	36			830	
9853	mineral	20-40	10YR 6/2	2.0	45	53	5.0	4.4	0.63	0.90	35			380	
9854	mineral	20-40	10YR 6/2	2.0	49	50	5.1	4.4	0.85	0.92	30			330	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, D-4

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9857	surface	1500	300	130	55	11	0.52	0.19	0.027	1.4	0.27	0.032		120	21	25	25
9858	surface	1500	280	110	54	11	0.49	0.20	0.028	1.3	0.27	0.031		110	21	24	22
9855	surface	1100	270	87	140	9.3	0.35	0.20	0.0098	1.3	0.26	0.013		97	21	22	12
9856	surface	1300	280	110	99	9.8	0.44	0.23	0.021	1.2	0.28	0.024		110	24	23	15
9853	mineral	840	330	120	260	9.8	0.26	0.16	0.0008	2.2	0.25	0.0040		91	27	30	12
9854	mineral	840	300	150	250	9.5	0.24	0.16	0.0012	1.7	0.23	0.0030		90	25	29	9.8

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, D-3

Date: 80/09/12

surface



0
10
22
45

Location Code: 2001104

Parent Material: lacustrine clay

UTM: 17T 590000 4749400

Vegetation: eastern white pine, white birch,
white ash, grasses

Landform: clay plain

Comments: many, small mottles (10YR 5/8) in
subsurface mineral horizon,
previously ploughed.

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9863	surface	0-10	10YR 4/1	14	38	48	6.8	6.4	4.2	3.4	37			2200	
9864	surface	0-10	10YR 4/1				6.8	6.4	4.3	3.3	50			2900	
9861	surface	10-22	10YR 4/2	14	37	49	7.0	6.5	2.9	2.6	39			2800	
9862	surface	10-22	10YR 4/2	13	39	48	6.9	6.5	3.0	2.8	45			2700	
9859	mineral	22-45	10YR 5/2	5.0	30	65	7.4	7.1	0.68	0.87	120			850	
9860	mineral	22-45	10YR 5/2	5.0	30	65	7.3	7.0	0.92	1.0	91			1100	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, D-3

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9863	surface	2800	610	640		21	0.49	0.10	0.018	1.9	0.20	0.089	<1.0	160	41	29	32
9864	surface	2900	610	640		21	0.50	0.10	0.019	1.9	0.20	0.10	<1.0	160	42	29	31
9861	surface	2500	620	830		19	0.48	0.080	0.011	1.8	0.20	0.082	<1.0	140	30	31	24
9862	surface	2600	620	800		20	0.51	0.090	0.012	1.8	0.20	0.085	<1.0	150	35	31	26
9859	mineral	1600	830	830		17	0.19	0.050	0.0050	1.6	0.18	0.051	1.0	120	41	46	14
9860	mineral	2000	800	800		19	0.22	0.050	0.0083	1.7	0.20	0.070	2.0	120	31	39	13

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, A-2

Date: 80/09/12

Location Code: 2001105

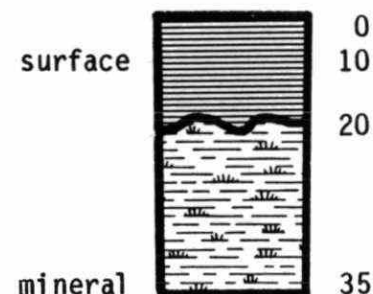
UTM: 17T 569000 4739100

Vegetation: eastern white pine, white birch
white ash

Landform: clay plain

Comments: many mottles (10YR 5/8) in
subsurface mineral horizon,
previously ploughed.

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9869	surface	0-10	10YR 4/2	19	42	39	7.0	6.6	5.0	3.5	13			850	
9870	surface	0-10	10YR 4/2	19	44	37	7.0	6.7	4.9	3.2	19			770	
9867	surface	10-20	10YR 3/1	18	45	37	7.1	6.6	3.7	2.7	15			660	
9868	surface	10-20	10YR 3/1	18	45	37	7.1	6.6	4.4	3.0	21			780	
9865	mineral	20-35	10YR 4/1	15	58	26	7.3	6.9	0.77	0.63	12			250	
9866	mineral	20-35	10YR 4/1	14	46	40	7.3	7.0	0.78	0.66	13			260	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, A-2

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9869	surface	3400	380	160		21	0.21	0.070	0.036	1.2	0.16	0.066	<1.0	160	24	22	44
9870	surface	3400	390	140		21	0.20	0.070	0.030	1.2	0.16	0.060	<1.0	160	23	22	44
9867	surface	3000	350	110		18	0.19	0.060	0.016	1.3	0.16	0.059	<1.0	160	30	22	34
9868	surface	3300	370	150		20	0.18	0.060	0.019	1.2	0.16	0.063	<1.0	170	25	19	39
9865	mineral	1700	330	58		11	0.17	0.060	0.0069	1.4	0.18	0.056	<1.0	110	11	24	11
9866	mineral	2000	330	66		13	0.17	0.050	0.0069	1.4	0.17	0.057	<1.0	110	22	26	12

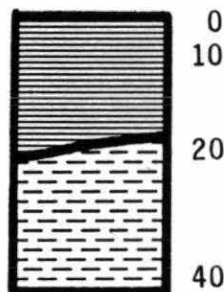
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, C-3

Date: 80/09/12

surface



mineral

Location Code: 2001106

UTM: 17T 579750 4755400

Vegetation: eastern white pine, white birch, white ash

Landform: clay plain

Comments: faint mottling in subsurface mineral horizon, previously ploughed.

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9875	surface	0-10	10YR 3/2	12	46	42	7.4	7.0	3.4	2.8	15			660	
9876	surface	0-10	10YR 3/2	12	46	42	7.5	7.0	4.4	3.1	22			700	
9873	surface	10-20	10YR 4/2	13	42	45	7.4	6.8	2.4	2.2	9.8			630	
9874	surface	10-20	10YR 4/2	13	44	43	7.4	7.0	2.7	2.3	17			630	
9871	mineral	20-40	10YR 4/3	9.0	36	55	7.2	6.8	0.85	0.94	9.3			710	
9872	mineral	20-40	10YR 4/3	9.0	37	54	7.4	6.8	0.81	1.1	11			750	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, C-3

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9875	surface	3400	460	190		21	0.090	0.050	0.020	1.5	0.18	0.098	<1.0	110	25	28	27
9876	surface	3600	480	220		22	0.080	0.050	0.022	1.4	0.19	0.094	<1.0	120	28	29	32
9873	surface	3600	420	75		22	0.090	0.050	0.014	1.4	0.17	0.087	<1.0	98	23	27	20
9874	surface	3600	430	92		22	0.090	0.060	0.018	1.5	0.19	0.10	<1.0	110	25	28	23
9871	mineral	4100	500	47		24	0.090	0.040	0.0041	1.5	0.19	0.051	<1.0	100	35	40	14
9872	mineral	3900	480	47		23	0.11	0.040	0.0046	1.6	0.21	0.059	<1.0	97	35	40	13

SOIL PROFILE INFORMATION

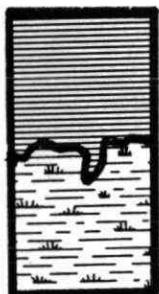
Horizon

Depth (cm)

Site: Nanticoke Seedling Plot, C-2

Date: 80/09/26

surface



0

20

mineral

40

Location Code: 2001107

UTM: 17T 576600 4747350

Landform: clay plain

Slope: level

Vegetation: eastern white pine, white birch,
white ash

Comments: slightly stoney and mottles in subsurface horizon (10YR 5/8), previously ploughed.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Ava il. P (ug/g)	Total P (ug/g)	Ava il. Al (ug/g)
9877	surface	0-10	10YR2.5/1	13	49	39	7.5	7.1	8.1	5.2	78			4900	
9878	surface	0-10	10YR2.5/1	11	49	40	7.6	7.3	8.8	6.5	74			6500	
9879	surface	10-20	10YR2.5/1	15	52	33	7.6	7.2	6.5	3.8	53			4500	
9880	surface	10-20	10YR2.5/1	16	50	34	7.5	7.1	7.4	4.4	48			5200	
9881	mineral	20-40	10YR 5/3	8.0	45	47	7.7	7.3	0.74	0.92	27			960	
9882	mineral	20-40	10YR 5/3	6.0	48	45	7.7	7.3	1.1	1.0	32			1300	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, C-2

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9877	surface	4700	780	1000		32	0.19	0.050	0.024	0.89	0.13	0.097	14	340	54	370	22
9878	surface	3900	860	640		28	0.20	0.050	0.027	0.94	0.13	0.099	14	360	52	23	240
9879	surface	3900	850	700		28	0.21	0.050	0.027	0.93	0.13	0.11	14	200	45	21	190
9880	surface	4500	860	700		31	0.21	0.050	0.030	0.96	0.14	0.11	15	530	60	24	200
9881	mineral	1600	470	1300		15	0.24	0.060	0.0077	1.8	0.22	0.049	4.0	100	25	30	19
9882	mineral	1600	470	1000		15	0.28	0.060	0.015	1.3	0.15	0.045	2.0	110	21	28	28

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Nanticoke Seedling Plot, A-4

Date: 80/09/26

surface

mineral



0
10

25

Location Code: 2001108

UTM: 17T 553750 4738550

Vegetation: eastern white pine, white birch,
white ash

Landform: sand plain

Comments: depth to watertable 25 cm

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9883	surface	0-10	10YR2.5/0	68	20	12	7.1	6.6	4.5	2.3	9.5			700	
9884	surface	0-10	10YR2.5/0	72	20	7.0	6.9	6.3	4.6	2.3	10			630	
9885	mineral	10-25	10YR 5/4	65	22	13	7.6	7.1	0.63	0.45	9.5			1000	
9886	mineral	10-25	10YR 5/4	61	26	13	7.5	7.0	0.55	0.32	7.8			990	

SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, A-4

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9883	surface	2200	140	19		12	0.16	0.11	0.0084	1.3	0.18	0.024	<1.0	85	26	12	14
9884	surface	2400	160	98		13	0.18	0.12	0.0095	1.4	0.19	0.029	<1.0	83	21	11	18
9885	mineral	1700	760	26		10	0.050	0.030	0.0031	1.7	0.20	0.081	1.0	75	31	27	5.4
9886	mineral	1600	150	24		9.0	0.040	0.030	0.0030	1.5	0.17	0.055	1.0	71	30	24	4.6

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Nanticoke Seedling Plot, C-1 Date: 80/09/26

surface 0 Location Code: 2001110

mineral 17 UTM: 17T 577250 4743400 Vegetation: eastern white pine, white birch, white ash

mineral 25 Landform: clay plain Comments: abundant stones in surface and mottles in subsurface mineral horizons (10YR 5/3)

mineral 40 Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9891	surface	0-17	10YR 4/2	17	31	52	6.2	5.9	2.1	1.7	15			530	
9892	surface	0-17	10YR 4/2	13	43	44	6.2	5.9	2.2	1.8	16			520	
9893	mineral	17-25	10YR 5/8	9.0	30	61	7.2	6.8	0.59	0.82	18			340	
9894	mineral	17-25	10YR 5/8	7.0	34	59	7.1	6.7	0.73	0.91	17			360	
9895	mineral	25-40	10YR 4/3	7.0	30	63	7.8	7.4	0.59	0.72	33			520	
9896	mineral	25-40	10YR 4/3	6.0	30	65	7.5	7.2	0.59	0.73	23			570	

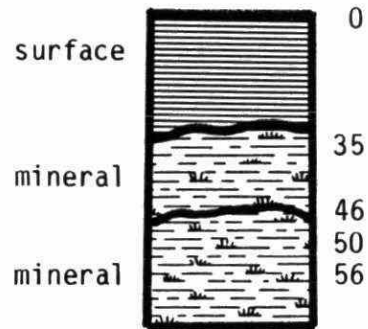
SOIL PROFILE INFORMATION (cont'd.)

Site: Nanticoke Seedling Plot, C-1

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9891	surface	2700	460	110		18	0.14	0.060	0.0098	1.7	0.20	0.068	<1.0	120	21	30	21
9892	surface	2700	460	130		18	0.14	0.060	0.012	1.7	0.20	0.079	<1.0	110	22	27	19
9893	mineral	3300	790	81		23	0.13	0.040	0.0052	1.9	0.23	0.063	<1.0	130	41	46	14
9894	mineral	3100	820	98		22	0.14	0.050	0.0045	1.8	0.22	0.039	<1.0	110	36	36	12
9895	mineral	3800	870	75		26	0.080	0.030	0.0041	1.7	0.0040	0.045	1.0	110	41	46	12
9896	mineral	3600	370	81		25	0.090	0.040	0.0037	1.7	<0.0020	0.062	2.0	120	42	50	14

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Waterloo County, Hawkesville Series Date: 80/10/01



Location Code: 2001112

UTM: 17T 535300 4802450

Vegetation: ash, poplar, yellow birch, beech

Landform: spillway

Slope: moderate slopes

Comments: depth to watertable 55 cm
distinct mottles (10YR 5/4) in
subsurface mineral horizons,
mottles (10YR 5/8) in surface,
previously ploughed.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9915	surface	0-35	10YR2.5/1	70	22	8.0	7.6	7.1	4.4	2.47	21			1400	
9916	surface	0-35	10YR2.5/1	64	28	8.0	7.5	7.0	4.2	2.08	19			1100	
9913	mineral	35-46	10YR 5/4	73	17	10	8.1	7.5	0.39	0.30	3.4			790	
9914	mineral	35-46	10YR 5/4	81	10	8.0	7.8	7.4	0.27	0.19	3.8			650	
9911	mineral	46-50	10YR 5/4	78	21	1.0	8.0	7.6	0.19	0.17	4.4			370	
9912	mineral	46-50	10YR 5/4	81	9.0	10	8.0	7.4	0.27	0.29	4.4			780	
9909	mineral	50-56	10YR 5/4				8.4	7.8	0.070	<0.13	2.9			510	
9910	mineral	50-56	10YR 5/4	85	11	4.0	8.5	7.9	0.050	<0.090	3.1			500	
9907	mineral	56+	10YR 5/4	84	16	<1.0	8.4	7.9	0.24	0.17	3.7			480	
9908	mineral	56+	10YR 5/4				7.6	7.8	0.21	0.20	3.9			550	

SOIL PROFILE INFORMATION (cont'd.)

Site: Waterloo County, Hawkesville Series

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9915	surface	3000	510	58		19	0.31	0.22	0.053	1.5	0.22	0.21	<1.0	130	58	19	21
9916	surface	3100	520	58		20	0.24	0.13	0.078	1.1	0.15	0.12	<1.0	120	52	17	27
9913	mineral	970	140	30		6.1	0.070	0.040	0.0035	1.9	0.12	0.076	3.0	96	39	11	8.6
9914	mineral	620	120	36		4.2	0.090	0.020	0.0041	1.4	0.10	0.036	4.0	97	40	9.6	8.4
9911	mineral	700	120	26		4.5	0.040	<0.0020	0.0052	1.3	0.080	0.031	5.0	77	32	8.3	7.6
9912	mineral	730	140	29		4.8	0.050	<0.0020	0.0041	1.9	0.11	0.046	3.0	98	42	8.0	8.9
9909	mineral	590	90	26		3.7	0.020	<0.0020	0.0029	0.41	0.040	0.0090	9.0	35	51	2.9	7.8
9910	mineral	460	70	24		2.9	0.010	<0.0020	0.0032	0.86	0.060	0.014	20	60	56	4.4	12
9907	mineral	660	90	24		4.1	0.010	<0.0020	0.0034	0.41	0.040	0.015	21	29	33	2.4	4.4
9908	mineral	650	90	24		4.0	0.030	<0.0020	0.0055	0.43	0.050	0.014	20	46	43	3.3	6.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Waterloo County, Elmira Series Date: 80/10/02

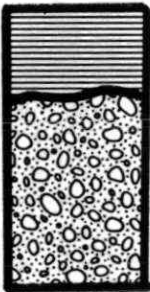
surface 0 Location Code: 2001113

mineral 23 UTM: 17T 549750 4815600 Vegetation: grass, pine

mineral 38 Landform: till plain Comments: exceedingly stoney.

mineral 51 Slope: level

mineral 55



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9923	surface	0-23	10YR 3/2	61	25	14	8.0	7.5	2.9	1.6	9.0			580	
9924	surface	0-23	10YR 3/2	59	27	14	8.0	7.6	1.9	1.6	6.6			570	
9921	mineral	23-38	7.5YR 4/4	81	12	6.0	8.3	7.8	0.44	0.37	2.7			380	
9922	mineral	23-38	7.5YR 4/4	80	14	6.0	8.2	7.7	0.47	0.35	2.6			340	
9919	mineral	38-51	10YR 4/4	92	5.0	3.0	8.6	7.8	0.25	0.39	2.5			430	
9920	mineral	38-51	10YR 4/4	86	10	4.0	8.23	7.8	0.29	0.36	3.4			320	
9917	mineral	51-55	10YR 6/4	91	6.0	3.0	8.6	7.9	0.33	0.28	1.8			390	
9918	mineral	51-55	10YR 6/4	92	5.0	2.0	8.5	7.9	0.21	0.17	1.6			410	

SOIL PROFILE INFORMATION (cont'd.)

Site: Waterloo County, Elmira Series

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9923	surface	2100	250	35		12	0.090	0.050	0.023	1.2	0.16	0.10	16	170	37	16	38
9924	surface	2000	230	35		12	0.080	0.040	0.019	0.94	0.12	0.079	19	150	56	12	31
9921	mineral	830	97	18		5.0	0.040	0.020	0.0046	0.58	0.060	0.042	45	150	41	7.8	20
9922	mineral	990	120	18		6.0	0.040	0.020	0.0047	0.68	0.070	0.045	44	160	18	9.5	22
9919	mineral	550	72	9.5		3.3	0.020	0.010	0.0041	0.35	0.030	0.018	65	150	62	7.2	28
9920	mineral	740	100	15		4.5	0.030	0.020	0.0041	0.51	0.050	0.031	45	130	44	7.8	23
9917	mineral	470	55	9.5		2.8	0.020	0.010	0.0045	0.48	0.040	0.022	62	220	82	7.2	30
9918	mineral	410	52	9.5		2.5	0.010	0.010	0.0025	0.43	0.040	0.020	65	210	56	5.4	24

SOIL PROFILE INFORMATION

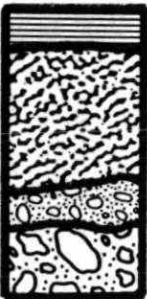
Horizon Depth (cm) Site: Waterloo County, London Series Date: 80/10/02

surface 0 Location Code: 2001114

mineral 20 UTM: 17T 550000 4817150 Vegetation: pine, grasses

mineral 30 Landform: kame moraine Comments: exceedingly stoney,
close to gravel pit

mineral 36 Slope: moderate slope



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9931	surface	0-20	10YR 3/3	47	38	15	8.0	7.5	2.6	1.3	8.5			390	
9932	surface	0-20	10YR 3/3	46	38	15	8.0	7.5	1.9	1.5	9.6			450	
9929	mineral	20-30	10YR 5/4	33	52	15	8.1	7.7	0.86	0.79	17			360	
9930	mineral	20-30	10YR 5/4	32	54	14	8.1	7.7	1.1	0.97	11			330	
9927	mineral	30-36	10YR 4/4	50	36	14	8.1	7.6	0.51	0.46	6.9			400	
9928	mineral	30-36	10YR 4/4	47	33	19	8.1	7.6		0.59	4.7			520	
9925	mineral	36+	10YR 6/4	50	36	15	8.0	7.5	0.57	0.52	6.5			450	
9926	mineral	36+	10YR 6/4	48	30	22	7.9	7.6	0.81	0.55	7.2			440	

SOIL PROFILE INFORMATION (cont'd.)

Site: Waterloo County, London Series

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9931	surface	2000	28	64		12	0.15	0.060	0.018	0.90	0.14	0.049		130	22	13	23
9932	surface	1900	280	81		12	0.14	0.060	0.021	0.89	0.14	0.050		120	35	13	30
9929	mineral	1500	220	18		9.3	0.27	0.11	0.012	1.0	0.20	0.049	2.0	130	33	14	22
9930	mineral	1500	210	24		9.3	0.26	0.10	0.014	1.0	0.19	0.042	3.0	120	38	14	25
9927	mineral	1400	260	21		9.1	0.17	0.090	0.0091	1.2	0.20	0.065	9.0	130	36	19	29
9928	mineral	1500	290	24		9.9	0.080	0.040	0.017	1.1	0.12	0.085	6.0	160	34	14	33
9925	mineral	1300	250	24		8.7	0.14	0.070	0.0088	0.95	0.17	0.060	18	120	19	16	23
9926	mineral	1700	380	29		12	0.16	0.070	0.0096	1.3	0.20	0.068	15	150	24	21	40

SOIL PROFILE INFORMATION

Horizon Depth (cm)

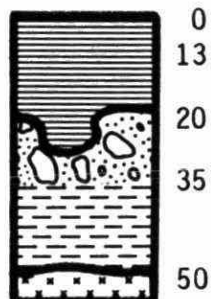
Site: Waterloo County, Perth Series

Date: 80/10/29

surface

mineral

mineral



Location Code: 2001119

UTM: 17T 521000 4831700

Landform: till plain/clay plain

Slope: nearly level

Vegetation: hawthorn

Comments: gravel at 20 to 35 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9973	surface	0-13	10YR 3/2	7.0	62	31	7.4	6.9	6.3	5.4	24			1300	
9974	surface	0-13	10YR 3/2	8.0	69	23	7.5	7.0	7.4	6.0	22			1400	
9971	surface	13-20	10YR 3/2	9.0	71	20	7.3	6.9	4.2	3.1	15			1100	
9972	surface	13-20	10YR 3/2	8.0	72	21	7.3	6.8	5.2	4.5	17			1200	
9969	mineral	20-35	10YR 4/4	7.0	58	35	7.4	7.1	0.84	1.0	11			820	
9970	mineral	20-35	10YR 4/4	8.0	61	31	7.5	7.0	1.2	1.3	11			690	
9967	mineral	35-50	10YR 4/4	5.0	55	40	7.6	7.2	0.60	0.65	14			940	
9968	mineral	35-50	10YR 4/4	4.0	57	39	7.6	7.2	0.63	0.91	15			980	
9965	mineral	50+	10YR 4/4	4.0	69	27	8.0	7.5	0.65	0.73	12			950	
9966	mineral	50+	10YR 4/4	3.0	56	41	8.1	7.6	0.64	0.62	13			920	

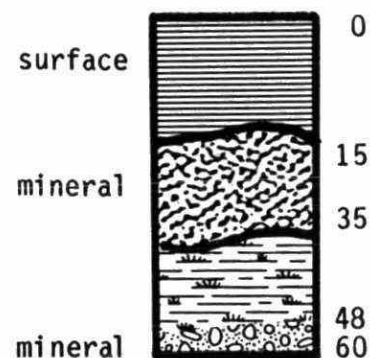
SOIL PROFILE INFORMATION (cont'd.)

Site: Waterloo County, Perth Series

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9973	surface	4500	660	190		28	0.19	0.16	0.075	1.1	0.22	0.080	<1.0	140	44	21	24
9974	surface	4900	680	190		30	0.19	0.18	0.094	1.2	0.18	0.086	<1.0	140	43	21	29
9971	surface	3700	580	92		23	0.27	0.23	0.084	1.1	0.18	0.084	<1.0	130	27	23	20
9972	surface	4200	600	710		28	0.27	0.25	0.11	1.2	0.25	0.10	<1.0	140	43	23	20
9969	mineral	2400	420	57		16	0.14	0.080	0.013	1.3	0.17	0.052	<1.0	120	45	31	19
9970	mineral	2500	440	57		16	0.21	0.11	0.022	1.3	0.18	0.051	<1.0	120	38	27	15
9967	mineral	2400	420	52		15	0.11	0.050	0.0085	1.3	0.17	0.050	1.0	120	62	35	23
9968	mineral	2500	440	57		16	0.11	0.060	0.0075	1.2	0.17	0.054	1.0	130	49	37	19
9965	mineral	2600	430	40		17	0.080	0.040	0.0097	1.2	0.17	0.047	7.0	130	47	38	24
9966	mineral	2500	420	46		16	0.090	0.040	0.012	1.2	0.17	0.049	3.0	130	68	22	38

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Waterloo County, Maryhill Series Date: 80/10/30



Location Code: 2001120

UTM: 17T 542900 4824350

Vegetation: ironwood, oak

Landform: till plain

Comments: calcium carbonate at 48 cm.
(10YR 7/2), mottles
(10YR 5/9) at 35-48 cm.,
evidence of ploughing.

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9981	surface	0-15	10YR2.5/1	40	14	45	7.3	7.0	7.5	5.6	25			1400	
9982	surface	0-15	10YR2.5/1	22	46	32	7.3	6.9	8.4	6.5	23			1500	
9979	mineral	15-35	10YR 5/8	29	43	28	7.4	7.0	1.8	1.6	20			1000	
9980	mineral	15-35	10YR 5/8	26	44	30	7.4	7.0	1.7	1.5	22			990	
9977	mineral	35-48	10YR 5/8	34	32	34	7.6	7.2	0.55	0.45	13			940	
9978	mineral	35-48	10YR 5/8	28	40	32	7.6	7.1	0.81	0.65	15			890	
9975	mineral	48+	10YR 5/8	11	51	38	7.8	7.2	0.32	0.41	15			870	
9976	mineral	48+	10YR 5/8	35	37	28	7.8	7.4	0.41	0.46	13			780	

SOIL PROFILE INFORMATION (cont'd.)

Site: Waterloo County, Maryhill Series

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9981	surface	4900	370	89		28	0.13	0.18	0.0032	0.58	0.18	0.0090	<1.0	130	34	19	28
9982	surface	4900	390	120		28	0.13	0.18	0.0039	0.57	0.18	0.011	<1.0	120	32	18	30
9979	mineral	2700		40			0.11	0.16	0.0020	0.92	0.17	0.010	<1.0	130	30	20	28
9980	mineral	2700	550	85		18	0.11	0.16	0.0022	0.76	0.17	0.009	<1.0	130	23	20	20
9977	mineral	1900	440	40		13	0.11	0.050	0.0028	1.7	0.14	0.027	1.0	110	31	20	22
9978	mineral	2300	470	43		15	0.12	0.090	0.0032	1.3	0.87	0.026	1.0	123	34	19	34
9975	mineral	1900	430	40		13	0.090	0.040	0.0020	1.6	0.16	0.065	2.0	130	40	29	16
9976	mineral	1800	400	38		12	0.090	0.040	0.0029	1.3	0.17	0.018	16	98	31	22	18

Horizon	Depth (cm)	Site: Wellesley	Date: 81/05/12
surface	0	Location Code: 2001133	
		UTM: 17T 519150 4812850	Vegetation: white birch
mineral	30	Landform: till plain/drumlins	
mineral	40	Slope: simple, class 1, level	Comments: depth to watertable 55 cm., faint mottling (10YR 5/6) in mineral horizon at 40-55cm., near A.P.I.O.S. precipitation collector site.
	55		

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18001	surface	0-15	10YR 3/2	54	24	22	6.8	6.4	3.0	3.0			<3.0		0.40
18000	surface	0-15	10YR 3/2	51	25	24	6.5	6.0	3.0	2.6			<3.0		0.34
17999	surface	15-30	10YR 3/2	54	23	23	6.8	6.3	2.0	1.7			<3.0		0.16
17998	surface	15-30	10YR 3/2	55	24	21	6.5	5.9	2.0	1.1			<3.0		0.30
17997	mineral	30-40	10YR 5/4	53	24	23	7.0	6.4	1.0	0.60			<3.0		<0.080
17996	mineral	30-40	10YR 5/4	50	23	27	6.3	5.6	1.0	0.50			<3.0		<0.080
17995	mineral	40-55	10YR 4/4	53	18	29	7.3	6.6	1.0	0.50			<3.0		<0.080
17994	mineral	40-55	10YR 4/4	53	19	28	7.4	6.7	1.0	0.60			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Wellesley

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18001	surface	2400	390	100		15	0.23	0.13	0.0093	0.80	0.17	0.014	<1.0	51	9.3	8.4	12
18000	surface	1800	360	110		12	0.29	0.17	0.0092	0.86	0.19	0.015	<1.0	62	9.7	9.3	12
17999	surface	1600	290	74		11	0.31	0.17	0.0090	0.88	0.18	0.017	<1.0	55	9.2	10	7.9
17998	surface	1200	240	58		8.2	0.38	0.20	0.0079	1.0	0.23	0.016	<1.0	64	10	11	7.4
17997	mineral	1000	230	47		7.0	0.20	0.094	0.0098	0.95	0.15	0.030	<1.0	57	12	17	8.8
17996	mineral	1000	250	48		7.1	0.18	0.066	0.0081	0.92	0.13	0.027	<1.0	49	11	14	3.7
17995	mineral	1500	350	58		10	0.10	0.042	0.0059	0.96	0.15	0.038	2.0	55	16	18	5.2
17994	mineral	1400	250	52		9.1	0.12	0.055	0.0071	0.91	0.14	0.035	3.0	47	12	16	5.2

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Luther Marsh Conservation Area

Date: 81/06/18

Location Code: 2001191

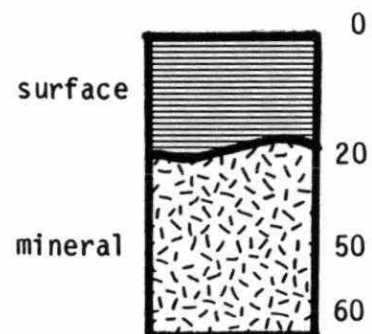
UTM: 17T 548200 4866950

Vegetation: pine

Landform: marsh/till plain

Slope: level

Comments: organic mottles throughout profile, pine needles in litter layer



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18182	surface	0-20	10YR 3/2	21	48	31	7.5	6.9	3.0	3.0			<3.0		0.22
18181	surface	0-20	10YR 3/2	21	52	27	7.4	6.9	2.0	2.7			<3.0		0.090
18180	mineral	20-50	10YR 5/6	28	49	23	7.7	7.0	<0.50	0.50			<3.0		0.11
18179	mineral	20-50	10YR 5/6	18	55	27	7.7	7.0	<0.50	0.60			<3.0		0.17
18178	mineral	50-60	10YR 5/6	48	33	19	7.8	7.1	<0.50	0.40			<3.0		<0.080
18177	mineral	50-60	10YR 5/6	43	36	21	7.8	7.1	<0.50	0.50			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Luther Marsh Conservation Area

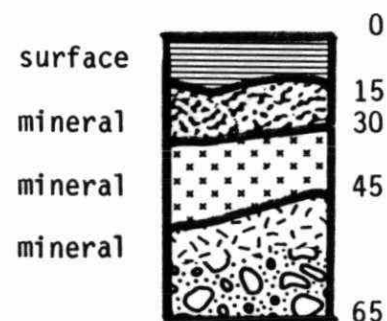
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18182	surface	2100	340	53		13	0.16	0.13	0.018	0.72	0.13	0.039	1.0	52	11	9.2	6.0
18181	surface	2000	480	41		14	0.16	0.13	0.017	0.85	0.15	0.040	1.0	51	11	10	6.0
18180	mineral	910	300	39		7.1	0.069	0.031	0.0020	0.80	0.10	0.020	1.0	25	8.8	6.1	<3.0
18179	mineral	1000	310	45		7.7	0.071	0.036	0.0020	0.42	0.058	0.012	1.0	32	9.6	7.8	3.9
18178	mineral	850	230	45		6.2	0.052	0.027	0.0012	0.42	0.044	0.023	2.0	35	12	10	<3.0
18177	mineral	690	230	45		5.4	0.051	0.024	0.0020	0.65	0.061	0.030	2.0	31	12	6.5	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Dufferin County, Guelph Series

Date: 81/06/18



Location Code: 2001208

UTM: 17T 568800 4859750

Vegetation: woodlot (managed), grasses

Landform: sand plain

Slope: extreme slopes

Comments: site is managed.
slightly stoney at 45cm

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18166	surface	0-15	10YR 3/3	81	6.0	13	7.9	7.3	1.0	0.80			<3.0		<0.080
18165	surface	0-15	10YR 3/3	77	9.0	13	7.9	7.3	1.0	0.90			4.0		0.11
18164	mineral	15-30	10YR 5/4	86	4.0	9.0	7.8	7.1	<0.50	0.30			<3.0		<0.080
18163	mineral	15-30	10YR 5/4	85	6.0	9.0	7.9	7.1	1.0	0.30			4.0		<0.080
18162	mineral	30-45	10YR 5/6	84	8.0	8.0	8.3	7.5	1.0	0.30			4.0		<0.080
18161	mineral	30-45	10YR 5/6	85	6.0	9.0	8.5	7.6	<0.50	0.30			<3.0		<0.080
18160	mineral	45-65	7.5YR 4/4	88	5.0	7.0	8.3	7.4	<0.50	0.20			4.0		<0.080
18159	mineral	45-65	7.5YR 4/4	87	5.0	8.0	8.4	7.5	<0.50	0.30			6.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Dufferin County, Guelph Series

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18166	surface	930	50	62		5.2							<1.0				
18165	surface	870	59	83		5.0							<1.0				
18164	mineral	420	31	52		2.5							<1.0				
18163	mineral	480	31	46		2.8							<1.0				
18162	mineral	750	42	17		4.1							3.0				
18161	mineral	750	45	15		4.1	0.044	0.034	0.0041	0.54	0.067	0.041	5.0				
18160	mineral	690	41	17		3.8	0.061	0.049	0.0043	0.51	0.079	0.037	1.0				
18159	mineral	640	41	15		3.6							1.0				

SOIL BASELINE ANALYTICAL DATA, 1980-1981

CENTRAL REGION

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Kelso Conservation Area

Date: 80/05/06

Location Code: 3001004

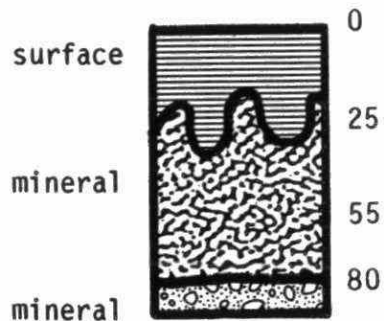
UTM: 17T 585400 4817300

Landform: till plain/limestone outcrop

Vegetation: oak

Slope: moderate slope

Comments: Stones at 80 cm



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9006	surface	0-25		66	22	12	7.0	6.3	3.5	2.1	12			640	
9007	mineral	25-55		61	26	13	7.0	6.2	0.56	0.58	8.0			670	
9008	mineral	70+		56	21	23	7.8	6.3	0.39	0.63	9.0			820	
9012	surface	0-25	2.5YR 3/2	70	16	14	7.1	6.5	3.0	2.0	11			690	
9011	mineral	25-55	7.5YR 4/4	67	24	9.0	6.9	5.9	0.31	0.43	11			680	
9010	mineral	55-80	7.5YR 4/4	67	25	7.0	7.0	6.0	0.16	0.33	7.9			780	
9009	mineral	80+	2.5YR 3/4	40	36	24	6.9	6.4	0.31	0.55	12			870	
9013	surface	0-15		65	25	10	6.7	5.0	3.1	1.9	11			560	
9014	mineral	25-55		71	19	10	6.9	6.1	0.61	0.52	6.4			530	
9015	mineral	80+		53	22	25	7.2	6.7	0.93	0.72	6.6			580	

SOIL PROFILE INFORMATION (cont'd.)

Site: Kelso Conservation Area

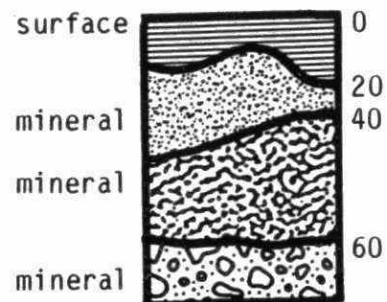
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9006	surface	2000	210	95		12	0.14	0.060	.044	0.94	0.13	0.10	<1.0	10	31	12	34
9007	mineral	960	120	47		5.9	0.10	0.050	.013	1.2	0.14	0.11	<1.0	63	30	18	13
9008	mineral	1800	90	34		10	0.060	0.030	.0053	1.7	0.17	0.13	<1.0	68	48	24	12
9012	surface	1800	200	180		11	0.17	0.090	.039				<1.0	82	16	12	18
9011	mineral	450	70	30		2.9	0.13	0.11	.0068	0.92	0.18	0.058	<1.0	50	13	12	4.8
9010	mineral	450	61	26		2.8	0.13	0.11	.0069	0.92	0.12	0.078	<1.0	39	19	13	7.0
9009	mineral	1600	180	34		11	0.060	0.040	.0035	1.7	0.18	0.19	<1.0	85	64	25	20
9013	surface	1800	27	120		9.5	0.080	0.030	.0050	1.0	0.19	0.080		82	19	14	23
9014	mineral	620	70	43		3.8	0.090	0.050	.011	0.81	0.11	0.062	<1.0	47	19	18	10
9015	mineral	1400	130	52		8.5	0.10	0.040	.013	1.3	0.14	0.11	<1.0	68	39	33	16

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Watershed A - Dorset

Date: 80/05/20



Location Code: 3001006

UTM: 17T 662250 5009750

Vegetation: sugar maple, birch, red oak

Landform: shallow till and rock ridges

Slope: moderate slope

Comments: some stones at depth

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9029	surface	0-15	5YR 2.5/2	50	42	8.0	5.0	4.2	5.4	3.4	23			280	
9028	mineral	20-40	5YR 4/3	63	35	2.0	5.5	4.6	3.2	1.8	7.0			740	
9027	mineral	40-60	7.5YR 4/4	78	15	7.0	5.6	4.7	1.2	0.69	5.6			710	
9026	mineral	60+	2.5YR 4/4	67	26	7.0	6.0	4.9	0.50	0.35	7.1			830	
9030	mineral	0-10	5YR 2.5/2	59	33	9.0	4.6	3.8	9.3	4.9	22			370	
9031	mineral	20-30	5YR 4/3	61	36	3.0	5.4	4.5	3.6	1.8	6.5			360	
9032	mineral	50+	2.5YR 4/4	78	22	<1.0	5.8	4.8	1.1	0.68	5.0			540	
9033	surface	0-20	5YR 2.5/2	48	44	9.0	4.5	3.6	8.0	4.5	27			330	
9034	mineral	20-40	5YR 4/3				4.8	4.0	4.1	2.2	12			280	160

SOIL PROFILE INFORMATION (cont'd.)

Site: Watershed A - Dorset

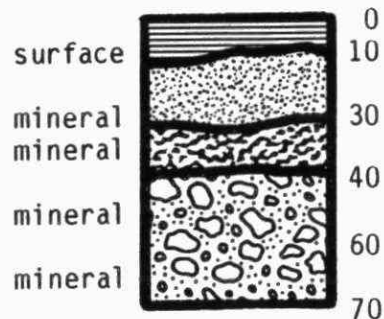
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9029	surface	1000	140	100	26	6.8	0.43	0.13	0.0092	1.1	0.18	0.015		70	9.7	2.4	34
9028	mineral	120	18	22	39	0.95	0.35	0.12	0.0032	1.1	1.2	0.0020		62	8.6	4.9	<3.0
9027	mineral	56	7.0	12	15	0.52	0.11	0.31	0.00040	0.39	0.42	0.0010		33	7.4	6.1	<3.0
9026	mineral	66	7.0	17	6.0	<0.50	0.060	0.18	0.0010	0.38	0.27	0.0040		49	16	10	<3.0
9030	surface	1200	150	170	54	7.7	0.51	0.17	0.0086	1.0	0.20	0.013		75	9.0	5.6	40
9031	mineral						0.78	0.68	0.0022	1.4	0.87	0.0080		94	5.0	4.6	3.4
9032	mineral	110	9.0	7.0	12	0.77	0.15	0.23	0.0060	0.50	0.40	0.0040		48	7.6	7.7	<3.0
9033	surface	770	100	130	92	5.9	0.41	0.19	0.0050	0.80	0.20	0.0060		53	9.4	8.1	39
9034	mineral	400	50	68	140	4.2	1.1	0.32	0.0032	1.8	0.45	0.0080		49	6.0	10	8.7

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Watershed A - Dorset

Date: 81/08/06



Location Code: 3001006

Vegetation: maple, oak, birch

UTM: 17T 662250 5009750

Comments: faint, discontinuous bleached horizon at 10 cm, not sampled, moderately stoney throughout pit.

Landform: shallow till and rock ridges

Slope: simple, class 5, moderate slope

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17540	surface	0-10	10YR 3/1				5.5	4.4							2.7
17539	surface	0-10	10YR 3/1				5.4	4.4							1.6
17538	mineral	10-30	7.5YR 4/4				5.3	4.4							6.3
17537	mineral	10-30	7.5YR 4/4				5.3	4.4							7.3
17536	mineral	30-40	10YR 5/4				5.2	4.5							4.4
17535	mineral	30-40	10YR 5/4				5.3	4.5							3.6
17534	mineral	40-60	10YR 6/4	82	16	2.0	5.2	4.5	1.0	0.50			<3.0		3.6
17533	mineral	40-60	10YR 6/4	82	16	2.0	5.2	4.3	1.0	0.50			<3.0		3.1
17532	mineral	60-70	10YR 6/4	82	16	2.0	5.1	4.5	1.0	0.60			<3.0		3.7
17531	mineral	60-70	10YR 6/4	84	14	2.0	5.2	4.4	1.0	0.40			<3.0		2.6

SOIL PROFILE INFORMATION (cont'd.)

Site: Watershed A - Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17540	surface	1400	140	120	18	8.6											
17539	surface	1800	190	110	9.0	11											
17538	mineral	200	15	19	82	2.0											
17537	mineral	150	11	11	77	1.6											
17536	mineral	32	2.0	11	48	0.68											
17535	mineral	32	2.0	11	37	0.57											
17534	mineral	27	2.0	16	35	0.55											
17533	mineral	27	2.0	11	35	0.53											
17532	mineral	27	2.0	14	48	0.66											
17531	mineral	48	2.0	14	34	0.63											

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Mark Burnham Provincial Park

Date: 80/05/22

surface



0

20

mineral

50

mineral

Location Code: 3001007

UTM: 17T 717950 4908500

Landform: drumlin/till plain

Slope: nearly level

Vegetation: maple, oak

Comments: rocky throughout profile

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9037	surface	0-20	7.5YR 2.5/0	49	32	19	7.8	7.3	5.5	3.7	17			910	
9036	mineral	20-50	7.5YR 3/2	34	34	32	7.9	7.4	1.0	0.90	9.7			1400	
9035	mineral	50+	7.5YR 8/2	54	24	22	8.4	7.7	0.43	0.28	7.5			730	
9038	surface	0-20		37	42	20	7.0	6.4	6.1	3.1	19			940	
9039	mineral	20-50		37	43	20	7.4	6.8	1.4	1.1	11			890	
9041	mineral	50+		57	31	12	8.6	7.8	0.37	0.37	7.0			770	
9043	surface	0-20		45	31	24	7.3	7.0	5.2	3.6	30			960	
9042	mineral	20-50		34	30	35	7.6	7.2	0.94	0.83	9.6			1200	164

SOIL PROFILE INFORMATION (cont'd.)

Site: Mark Burnham Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9037	surface	3300	74	51		17	0.43	0.18	0.023	1.2	0.21	0.054	1.0	77	15	7.7	15
9036	mineral	2400	47	34		13	0.64	0.040	0.0028	1.2	0.16	0.057	1.0	60	27	19	6.5
9035	mineral	1100	12	26		5.6	0.020	0.010	0.0020	0.59	0.060	0.023	43	20	13	7.3	<3.0
9038	surface	3100	74	69		16	0.40	0.18	0.033	1.2	0.23	0.061	<1.0	81	15	10	16
9039	mineral	1400	33	30		7.6	0.18	0.090	0.0089	0.98	0.15	0.040	<1.0	49	17	14	5.1
9041	mineral	1100	12	21		5.5	0.010	0.010	0.0013	0.41	0.040	0.016	47	20	17	5.6	<3.0
9043	surface	3700	60	43		19	0.33	0.13	0.022	1.2	0.20	0.062	<1.0	75	17	7.7	18
9042	mineral	2700	51	39		14	0.10	0.040	0.0061	1.0	0.15	0.057	42	59	23	19	6.8

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Warsaw Caves Conservation Area

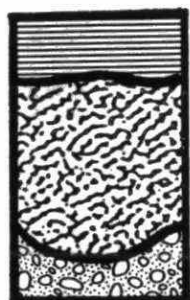
Date: 80/05/27

surface

mineral

mineral

mineral



0

20

45

70

75

Location Code: 3001008

UTM: 17T 249550 4926700

Landform: moraine/spillway

Slope: nearly level

Vegetation: spruce, grass, moss

Comments: area of karst topography,
limestone caves, kettles, stones
in pit

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9045	surface	0-20	5YR 2.5/1	71	14	15	7.2	6.6	7.3	0.34	7.7			570	
9046	mineral	20-45	5YR 4/4	73	16	11	6.8	5.9	0.82	0.33	7.6			370	
9044	mineral	45-70	5YR 4/4	77	14	9.0	6.6	5.8	0.70	4.0	17			510	
9040	mineral	70+	7.5YR 5/2	71	13	16	8.6	7.7	0.25	0.39	6.9			510	
9049	surface	0-20	5YR 2.5/1	67	11	21	7.4	6.8	8.2	3.6	17			360	
9048	mineral	20-75	5YR 4/4	70	10	20	7.3	6.8	1.0	0.60	10			480	
9047	mineral	75+	7.5YR 5/2	70	15	15	8.7	7.8	0.11	0.11	8.0			710	
9052	surface	0-20	5YR 2.5/1	66	13	21	7.6	7.2	5.1	3.3	19			560	
9051	mineral	20-75	5YR 4/4	67	9.0	25	7.8	6.7	0.59	0.42	12			460	
9050	mineral	75+	7.5YR 5/2	76	15	9.0	8.5	7.8	0.31	0.22	8.0			830	

SOIL PROFILE INFORMATION (cont'd.)

Site: Warsaw Caves Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9045	surface	1700	23	25		8.6	0.17	0.090	0.070	0.78	0.15	0.099	<1.0	110	20	6.0	17
9046	mineral	890	12	8.4		4.6	0.13	0.090	0.0061	0.84	0.14	0.014	<1.0	40	12	5.7	4.5
9044	mineral	2200	100	52		12	0.15	0.060	0.0095	1.0	0.17	0.056	<1.0	40	13	12	7.7
9040	mineral	780	2.0	8.4		3.9	0.19	0.090	0.0090	0.29	0.090	0.016	48	13	15	4.2	<3.0
9049	surface	3100	110	30		16	0.080	0.060	0.035	0.60	0.12	0.040	<1.0	87	19	5.4	35
9048	mineral	1300	25	26		6.6	0.15	0.11	0.015	1.1	0.23	0.072	<1.0	37	17	9.6	8.6
9047	mineral	650	2.0	8.4		3.3	0.10	0.010	0.0021	0.22	0.030	0.0090	18	12	12	3.2	<3.0
9052	surface	3300	79	100		17	0.11	0.030	0.10	0.57	0.11	0.098	<1.0	70	23	6.6	19
9051	mineral	1200	23	39		6.3	0.10	0.060	0.018	0.75	0.11	0.048	<1.0	32	16	11	7.6
9050	mineral	940	5.0	8.4		4.8	0.020	0.020	0.0029	0.22	0.041	0.010	18	12	12	5.4	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Warsaw-Esker (Peterborough)

Date: 80/05/22

surface 0
20

Location Code: 3001009

UTM: 17T 248700 4925250

Vegetation: grass

mineral 500

Landform: esker

Slope: strong slope

Comments: unstratified rocks,
esker used for gravel

mineral 1000



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9053	surface	0-20	10YR 3/3	58	17	26	8.0	7.5	2.1	1.8	11		1100		
9054	mineral	130	10YR 4/3	69	8.0	22	8.2	7.8	0.68	0.53	6.4		820		
9055	mineral	400	10YR 5/3	75	11	14	8.4	7.8	0.81	0.57	7.5		770		
9056	mineral	600	10YR 4/3	72	14	14	8.1	7.7	1.2	0.94	9.1		1100		
9057	mineral	1000	10YR 4/3	69	11	20	8.4	7.8	0.93	0.68	7.6		750		

SOIL PROFILE INFORMATION (cont'd.)

Site: Warsaw-Esker-(Peterborough)

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9053	surface	2300	49	43		12	0.080	0.070	0.028	1.2	0.16	0.12	4.0	68	20	18	12
9054	mineral	1400	18	17		7.5	0.030	0.040	0.0052	0.76	0.080	0.044	20	44	27	14	7.6
9055	mineral	1400	14	30		7.5	0.020	0.030	0.0047	0.79	0.10	0.062	22	61	29	13	7.1
9056	mineral	1500	28	43		8.0	0.030	0.040	0.0076	0.73	0.090	0.066	18	65	28	14	10
9057	mineral	1500	28	37		7.8	0.030	0.040	0.0080	0.68	0.080	0.067	20	61	32	14	5.1

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Bronte Creek Provincial Park

Date: 80/06/11

surface

mineral

mineral

mineral



Location Code: 3001020

UTM: 17T 600200 4806400

Landform: shale plain/beach

Slope: nearly level

Vegetation: oak, hawthorn

Comments: faint bleached horizon, slightly mottled, glacial Lake Iroquois shoreline.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9154	surface	0-20	5YR 3/2	16	53	32	6.2	5.6	4.2	3.4	15			780	
9155	surface	0-20	5YR 3/2	15	52	33	6.4	5.7	1.3	3.1	15			730	
9152	mineral	20-30	7.5YR 4/4	18	57	25	5.7	4.8	0.45	0.54	8.7			250	
9153	mineral	20-30	7.5YR 4/4	16	59	25	5.7	4.7	0.33	0.45	9.8			210	
9150	mineral	30-45	5YR 4/4	9.0	45	46	5.4	4.6	0.35	0.72	20			360	
9151	mineral	30-45	5YR 4/4	8.0	43	50	5.4	4.7	0.29	0.48	23			290	
9148	mineral	45-55	2.5YR 3/4	8.0	53	39	6.6	5.9	0.35	0.49	14			810	
9149	mineral	45-55	2.5YR 3/4	6.0	44	51	6.1	5.3	0.35	0.64	23			600	

SOIL PROFILE INFORMATION (cont'd.)

Site: Bronte Creek Provincial Park

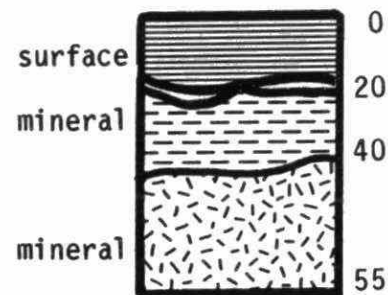
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9154	surface	3600	280	290		21	0.23	0.10	0.0360	1.4	0.23	0.13	<1.0	130	31	20	42
9155	surface	3900	330	350		23	0.21	0.10	0.0360	1.5	0.26	0.16	<1.0	120	24	19	68
9152	mineral	900	73	54	27	5.5	0.17	0.060	0.0015	1.6	0.16	0.024		65	29	20	11
9153	mineral	900	63	44	41	5.5	0.17	0.060	0.0016	1.5	0.16	0.021		66	35	19	10
9150	mineral	1900	130	53	170	13	0.060	0.030	0.0011	1.8	0.17	0.048		78	39	29	11
9151	mineral	2200	140	53	190	14	0.12	0.060	0.0011	1.9	0.17	0.034		79	36	29	11
9148	mineral	3000	160	37		16	0.040	0.020	0.0020	1.7	0.16	0.13	<1.0	81	29	38	14
9149	mineral	3600	180	42	<4.5	19	0.070	0.030	0.0038	1.8	0.14	0.12	<1.0	80	31	35	12

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Bronte Creek Provincial Park

Date: 81/05/20



Location Code: 3001020

UTM: 17T 600200 4806400

Vegetation: oak, hawthorn

Landform: till plain

Slope: level

Comments: bleached horizon at 18-20 cm not sampled

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17181	surface	0-20	10YR 3/2	16	43	41	6.2	5.3	4.0	3.0			5.0		0.22
17180	surface	0-20	10YR 3/2	19	38	43	6.1	5.4	4.0	3.4			4.0		0.38
17179	mineral	20-40	10YR 4/4	36	26	38	5.4	4.6	1.0	0.60			<3.0		0.58
17178	mineral	20-40	10YR 4/4	20	53	27	5.6	4.5	1.0	0.50			<3.0		0.24
17177	mineral	40-55	2.5YR 5/4	14	44	42	5.7	5.0	1.0	0.60			<3.0		<0.080
17176	mineral	40-55	2.5YR 5/4	13	30	57	5.7	4.9	1.0	0.70			<3.0		0.12

SOIL PROFILE INFORMATION (cont'd.)

Site: Bronte Creek Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17181	surface	1800	280	260	<2.3	12							<1.0				
17180	surface	1700	270	250	<2.3	11							<1.0				
17179	mineral	770	66	49	30	4.8											
17178	mineral	1200	88	40	28	7.0											
17177	mineral	1800	160	53	6.0	11							<1.0				
17176	mineral	2100	150	46	15	12											

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Goodrich-Loomis Conservation Area Date: 80/06/16

surface 0 Location Code: 3001025

mineral 12 UTM: 18T 274500 4889400 Vegetation: till/lacustrine deposit

mineral 15 Landform: drumlin/beach deposit

mineral 35 Slope: moderate slope Comments: clay accumulation could be lacustrine deposit

mineral 60

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9191	surface	0-12	10YR 3/3	68	20	11	8.2	7.7	0.45	0.21	3.1			500	
9192	surface	0-12	10YR 3/3	75	17	9.0	8.1	7.6	0.58	<0.12	4.1			20	
9190	mineral	12-15	10YR 6/3	76	17	7.0	8.2	7.5	0.12	0.40	2.1			910	
9188	mineral	15-35	7.5YR 4/4	60	15	24	8.3	7.7	0.21	0.31	2.6			1100	
9189	mineral	15-35	7.5YR 4/4	65	12	23	8.1	7.7	0.25	0.24	2.9			560	
9186	mineral	35-40	5Y 5/4	76	16	9.0	8.7	7.8	0.12	0.20	1.4			680	
9187	mineral	35-40	5Y 5/4	68	18	14	8.8	7.8	0.12	<0.15	1.1			520	
9184	mineral	40-60	5Y 6/4	82	16	3.0	8.7	7.9	0.080	1.9	1.4			570	
9185	mineral	40-60	5Y 6/4	79	20	1.0	8.7	7.8	0.11	0.28	1.3			630	

SOIL PROFILE INFORMATION (cont'd.)

Site: Goodrich-Loomis Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9191	surface	1000	8.5	21		5.2	0.020	0.020	0.0021	0.45	0.060	0.016	2.0	22	10	4.4	<3.0
9192	surface	960	8.5	21		4.9	0.020	0.020	0.0025	0.41	0.060	0.015	4.0	22	11	3.9	3.1
9190	mineral	550	4.2	13		2.8	0.030	0.020	0.0016	0.34	0.040	0.012		13	12	3.4	<3.0
9188	mineral	1500	8.5	17		7.5	0.020	0.020	0.0020	0.77	0.090	0.022	4.0	23	12	8.9	<3.0
9189	mineral	1500	8.5	17		7.6	0.030	0.020	0.0021	1.0	0.13	0.022	2.0	31	23	11	<3.0
9186	mineral	490	4.2	8.3		2.5	0.010	0.010	0.00090	0.20	0.020	0.0090	35	8.9	13	3.4	4.4
9187	mineral	490	4.2	8.3		2.5	0.010	0.010	0.0013	0.21	0.020	0.010	33	7.5	9.5	2.4	<3.0
9184	mineral	460	4.2	8.3		2.3	0.010	<0.0020	0.00040	0.19	0.020	0.0080	38	9.0	20	2.3	<3.0
9185	mineral	470	4.2	8.3		2.4	0.010	0.010	0.00060	0.19	0.020	0.0090	32	7.9	14	2.5	4.2

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Ferris Provincial Park Date: 80/06/16

surface 0 Location Code: 3001026


 5 UTM: 18T 277300 4908500 Vegetation: maple, oak, grass

 15 Landform: drumlin

mineral 40 Slope: nearly level Comments: many stones

 55

mineral 60



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9201	surface	0-5	5YR 2.5/1	25	43	32	7.2	6.6	4.9	3.6	15			1100	
9202	surface	0-5	5YR 2.5/1	29	42	29	6.2	5.8	5.3	3.6	19			1100	
9199	surface	5-15	5YR 2.5/2	34	44	22	7.6	7.1	3.1	2.6	8.3			920	
9200	surface	5-15	5YR 2.5/2	32	43	25	7.4	6.7	2.4	2.2	8.4			1100	
9197	mineral	15-40	5YR 3/4	26	41	33	7.8	7.2	1.1	0.91	6.1			1000	
9198	mineral	15-40	5YR 3/4				7.6	7.0	0.88	0.74	5.2			890	
9195	mineral	40-55	5YR 3/4	19	43	38	7.9	7.4	0.66	0.58	6.3			860	
9196	mineral	40-55	5YR 3/4	23	45	32	7.9	7.2	0.84	0.87	6.2			1100	
9193	mineral	55+	7.5YR 6/2	56	26	18	8.4	7.8	0.19	0.48	3.4			580	
9194	mineral	55+	7.5YR 6/2	52	29	19	8.4	7.8	0.23	0.20	3.1			550	

SOIL PROFILE INFORMATION (cont'd.)

Site: Ferris Provincial Park

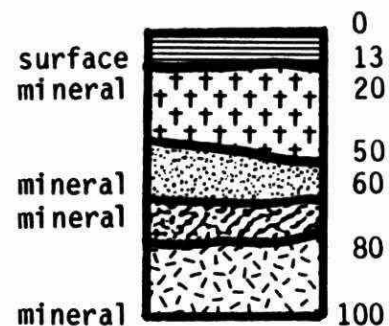
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9201	surface	4200	130	190		23	0.12	0.070	0.092	1.0	0.14	0.098		87	28	14	14
9202	surface	3400	140	190		19	0.14	0.090	0.099	1.0	0.16	0.086	<1.0	85	28	14	15
9199	surface	3500	78	76		18	0.10	0.060	0.044	0.95	0.12	0.089	4.0	83	34	14	8.9
9200	surface	3200	65	68		17	0.11	0.060	0.030	0.90	0.11	0.073		72	24	13	6.8
9197	mineral	320	79	69		2.4	0.080	0.060	0.0091	1.4	0.16	0.080	2.0	86	31	23	5.6
9198	mineral	230	61	51		1.8	0.080	0.050	0.0084	1.1	0.14	0.084	2.0	74	31	16	5.4
9195	mineral	340	70	64		2.4	0.050	0.030	0.0045	1.3	0.14	0.056	2.0	73	30	20	4.1
9196	mineral	320	70	69		2.3	0.070	0.040	0.0042	1.3	0.15	0.067	2.0	76	32	19	4.8
9193	mineral	1100	17	42		5.8	0.010	0.010	0.0010	0.49	0.040	0.017	40	23	22	7.3	<3.0
9194	mineral	1100	17	42		5.8	0.010	0.010	0.0013	0.49	0.040	0.018	42	23	28	7.2	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Bass Lake Provincial Park

Date: 80/06/23



Location Code: 3001032

UTM: 17T 620450 4939550

Vegetation: maple, pine, grassland

Landform: sand plain/beach

Slope: moderate slopes

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9254	surface	0-13	10YR 3/2	54	27	19	6.4	5.8	3.4	7.1	17			580	
9255	surface	0-13	10YR 3/2	58	25	17	6.5	5.7	3.3	7.5	20			640	
9252	mineral	13-20	10YR 4/3	62	27	11	6.5	5.5	1.4	0.98	13			540	
9253	mineral	13-20	10YR 4/3	63	26	11	6.1	5.2	1.8	1.3	14			680	
9250	mineral	20-50	10YR 4/3	63	28	9.0	6.6	5.5	1.1	0.74	17			590	
9251	mineral	20-50	10YR 4/3	63	28	9.0	6.5	5.4	1.3	0.73	14			580	
9248	mineral	50-60	7.5YR 5/6	60	28	12	6.6	5.6	0.82	0.54	15			490	
9249	mineral	50-60	7.5YR 5/6	69	28	3.0	6.6	5.5	0.94	0.74	15			910	
9246	mineral	60-80	7.5YR 5/6	69	24	7.0	6.5	5.7	0.80	0.54	14			590	
9247	mineral	60-80	7.5YR 5/6	65	26	8.0	6.5	5.5	0.98	0.48	13			740	178
9244	mineral	80-100	10YR 4/3	70	21	9.0	6.4	5.0	0.35	<0.13	10			460	
9245	mineral	80-100	10YR 4/3	70	21	9.0	6.4	5.0	0.32	0.21	12			400	

SOIL PROFILE INFORMATION (cont'd.)

Site: Bass Lake Provincial Park

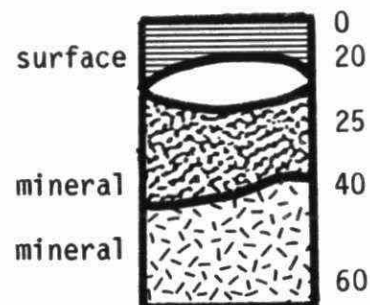
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9254	surface	1400	150	120		8.5	0.17	0.10	0.049	0.92	0.22	0.065	<1.0	57	27	7.1	9.9
9255	surface	1300	120	110		7.4	0.19	0.15	0.054	0.85	0.21	0.058	<1.0	56	22	7.5	12
9252	mineral						0.15	0.14	0.016	0.81	0.24	0.067	<1.0	56	25	7.8	3.7
9253	mineral	710	66	37	<2.3	4.2	0.13	0.12	0.020	0.98	0.20	0.055	<1.0	52	29	6.4	4.3
9250	mineral	670	36	12	<2.3	3.7	0.25	0.18	0.010	1.0	0.18	0.075	<1.0	55	20	7.1	<3.0
9251	mineral	740	61	22	<2.3	4.3	0.19	0.15	0.0089	1.2	0.15	0.060	<1.0	53	8.5	7.4	<3.0
9248	mineral	660	24	21		3.5	0.27	0.23	0.0063	1.1	0.23	0.058	<1.0	58	34	9.9	<3.0
9249	mineral	660	15	17		3.4	0.27	0.27	0.0056	1.2	0.30	0.049		60	18	11	<3.0
9246	mineral	490	13	17		2.6	0.21	0.26	0.0058	0.98	0.30	0.066		47	41	8.7	<3.0
9247	mineral	400	8.0	17		2.1	0.12	0.21	0.0057	1.0	0.21	0.041		52	41	12	3.1
9244	mineral	200	12	7.0	<2.3	1.1	0.040	0.060	0.0025	0.43	0.060	0.033	<1.0	16	17	5.5	<3.0
9245	mineral	230	42	10		1.2	0.040	0.050	0.0025	0.75	0.11	0.083	<1.0	26	17	8.7	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Moonstone

Date: 80/06/23



Location Code: 3001033

UTM: 17T 603650 4943750

Vegetation: maple, birch, oak

Landform: sand plain

Slope: nearly level

Comments: irregular bleached horizon,
near A.P.I.O.S. precipitation
collector

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9263	surface	0-10	5YR 3/1	60	22	18	7.7	7.1	3.4	0.94	8.3			600	
9264	surface	0-10	5YR 3/1	61	24	15	7.6	7.1	3.5	1.4	8.4			820	
9261	surface	10-20	5YR 3/1	61	21	18	7.5	7.1	2.2	1.1	7.8			840	
9262	surface	10-20	5YR 3/1	58	22	19	7.5	6.7	3.0	1.2	6.8			700	
9260	surface mineral	20-25	10YR 5/3	64	22	14	7.2	6.6	1.4	0.55	6.4			660	
9258	mineral	25-40	10YR 4/4	61	26	13	7.1	6.4	0.78	0.51	6.6			900	
9259	mineral	25-40	10YR 4/4	64	26	10	7.1	6.4	0.74	0.51	8.7			730	
9256	mineral	40-60	10YR 4/4	79	9.0	12	7.1	6.3	0.39	0.21	5.5			450	
9257	mineral	40-60	10YR 4/3	83	9.0	8.0	7.1	6.4	0.23	<0.13	5.4			430	

SOIL PROFILE INFORMATION (cont'd.)

Site: Moonstone

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9263	surface	2300	180	120		13	0.16	0.080	0.049	0.75	0.15	0.096	1.0	67	21	9.3	22
9264	surface	2100	160	110		12	0.19	0.10	0.065	0.73	0.15	0.097	1.0	68	39	9.5	20
9261	surface	1700	150	63		10	0.30	0.14	0.048	0.78	0.17	0.12	1.0	62	15	8.5	9.9
9262	surface	2000	160	71		11	0.20	0.12	0.067	0.85	0.19	0.18	<1.0	68	20	9.5	10
9260	surface mineral	930	68	47		5.3	0.19	0.13	0.017	0.77	0.19	0.071	<1.0	45	23	9.4	<3.0
9258	mineral	820	52	17		4.5	0.17	0.14	0.0054	0.85	0.27	0.031	<1.0	50	32	9.3	<3.0
9259	mineral	810	51	28		4.5	0.31	0.21	0.0076	0.97	0.26	0.037	<1.0	53	20	10	4.0
9256	mineral	770	52	42		4.4	0.060	0.060	0.0030	0.66	0.090	0.029	<1.0	36	27	10	<3.0
9257	mineral	420	17	34		2.3	0.040	0.050	0.0017	0.48	0.12	0.0038	<1.0	18	20	6.4	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Springwater Provincial Park

Date: 80/06/23

surface

mineral

mineral

mineral

mineral



0
20
30
50
70
80

Location Code: 3001034

UTM: 17T 598450 4921500

Landform: sand plain

Slope: level

Vegetation: pine

Comments: iron stains (2.5YR 3/6) at the 70-80 cm depth

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9273	surface	0-20	7.5YR 4/2	96	3.0	1.0	6.1	5.0	2.0	0.66	6.4			410	
9274	surface	0-20	7.5YR 4/2	93	2.0	5.0	5.7	4.9	2.1	0.71	6.6			420	
9271	mineral	20-30	5YR 4/6	93	1.0	6.0	6.5	5.8	1.5	0.45	4.0			970	
9272	mineral	20-30	5YR 4/6	98	1.0	1.0	6.6	5.2	1.3	0.52	3.7			990	
9269	mineral	30-50	10YR 5/6	100	<1.0	<1.0	6.2	5.4	2.0	<0.13	6.1			790	
9270	mineral	30-50	10YR 5/6	100	<1.0	<1.0	6.2	5.2	0.82	<0.12	4.9			560	
9267	mineral	50-70	10YR 5/4	100	1.0	<1.0	6.2	5.2	0.44	<0.12	6.0			740	
9268	mineral	50-70	10YR 5/4	100	<1.0	<1.0	6.2	5.3	0.60	<0.11	5.4			800	
9265	mineral	70-80	2.5Y 4/4	98	<1.0	1.0	6.2	5.4	0.35	<0.09	4.4			500	
9266	mineral	70-80	2.5Y 4/4	97	2.0	1.0	6.3	5.3	0.43	<0.12	4.8			710	182

SOIL PROFILE INFORMATION (cont'd.)

Site: Springwater Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9273	surface	370	29	25	9.3	3.2	0.14	0.19	0.0015	0.55	0.27	0.0030	<1.0	24	22	97	4.6
9274	surface	430	140	25	14	3.2	0.18	0.24	0.0018	0.45	0.26	0.0040		26	36		5.8
9271	mineral	510	21	17	3.0	3.0	0.19	0.22	0.00040	0.56	0.28	0.0010	<1.0	20	26	110	<3.0
9272	mineral	500	26	21	2.3	2.8	0.13	0.19	0.00040	0.55	0.30	0.0020	<1.0	21	26	96	<3.0
9269	mineral	99	10	17	4.0	0.66	0.070	0.10	0.00090	0.42	0.15	0.0030	<1.0	15	24	94	<3.0
9270	mineral	150	10	17	4.8	0.92	0.090	0.13	0.00040	0.38	0.18	0.0010		16	26	80	<3.0
9267	mineral	88	5.0	4.0	2.6	0.55	0.11	0.13	0.0030	0.36	0.18	0.0090	<1.0	14	26	5.1	<3.0
9268	mineral	110	7.0	17	2.6	0.69	0.070	0.080	0.00040	0.33	0.13	0.0020	<1.0	14	15		<3.0
9265	mineral	88	5.0	2.4	<2.3	0.51	0.21	0.090	0.0013	0.84	0.16	0.0040	<1.0	13	29	5.3	<3.0
9266	mineral	88	5.0	4.0	<2.3	0.51	0.15	0.090	0.00060	0.72	0.16	0.0020	<1.0	15	46	5.4	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Cookstown

Date: 80/06/23

surface

mineral

mineral

mineral



0

30

55

75

100

Location Code: 3001036

UTM: 17T 596150 4908500

Landform: drumlin

Slope: moderate slopes

Vegetation: grass

Comments: air-dry colours given,
very stoney at depth

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9281	surface	0-30	10YR 4/2	29	46	25	7.9	7.5	2.5	1.6	12			800	
9282	surface	0-30	10YR 4/2	28	44	27	8.0	7.5	2.4	2.0	13			890	
9279	mineral	30-55	10YR 6/3	23	62	14	7.9	7.2	0.40	0.47	7.1			850	
9280	mineral	30-55	10YR 6/3	25	63	12	7.9	7.2	0.45	0.35	8.5			760	
9277	mineral	55-75	10YR 5/4	49	26	25	8.0	7.4	0.44	0.27	3.7			740	
9278	mineral	55-75	10YR 5/4	53	22	25	7.9	7.4	0.44	0.26	0.50			720	
9275	mineral	75-100	2.5Y 6/2	69	17	14	8.5	7.8	0.15	<0.15	2.1			490	
9276	mineral	75-100	2.5Y 6/2	72	14	13	8.6	7.9	0.15	0.17	3.3			440	

SOIL PROFILE INFORMATION (cont'd.)

Site: Cookstown

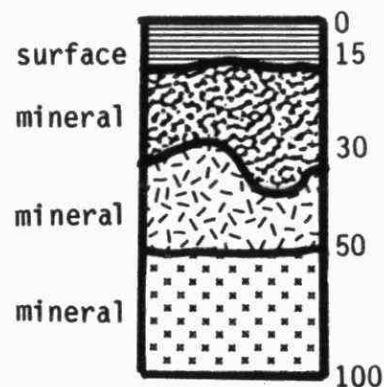
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9281	surface	2400	59	47		13	0.090	0.060	0.0073	0.80	0.15	0.062	1.0	52	20	8.8	8.1
9282	surface	2400	59	47		13	0.12	0.080	0.015	0.83	0.16	0.059	2.0	53	18	8.0	7.5
9279	mineral	1000	11	39		5.2	0.13	0.11	0.0027	0.65	0.17	0.021	2.0	28	14	9.2	3.7
9280	mineral	980	11	39		5.0	0.13	0.11	0.0020	0.63	0.17	0.020	1.0	28	17	8.6	3.6
9277	mineral	1500	43	32		7.9	0.070	0.020	0.0021	0.90	0.11	0.035	2.0	32	29	12	<3.0
9278	mineral	1600	51	36		8.6	0.070	0.020	0.0021	0.93	0.12	0.033	2.0	32	28	13	3.5
9275	mineral	680	25	28		3.6	0.010	0.010	0.00060	0.22	0.030	0.011	22	15	14	7.0	<3.0
9276	mineral	1500	43	32		7.9	0.010		0.0015	0.23	0.030	0.011	24	16	19	6.9	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Earl Rowe Provincial Park

Date: 80/06/23



Location Code: 2001037

UTM: 17T 587450 4890150

Vegetation: maple

Landform: sand plain

Slope: simple, class 1, level

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9292	surface	0-15	5YR 2.5/1	74	7.0	19	6.6	6.0	4.6	3.3	14			410	
9293	surface	0-15	5YR 2.5/1	69	5.0	26	6.5	5.8	4.2	2.0	14			300	
9289	mineral	15-30	10YR 5/8	92	3.0	5.0	6.5	5.4	0.47	0.28	2.4			340	
9290	mineral	15-30	10YR 5/8	93	3.0	4.0	6.4	5.4	0.44	0.26	2.7			310	
9287	mineral	30-50	10YR 5/6	90	2.0	8.0	6.8	5.8	0.23	<0.12	1.2			510	
9288	mineral	30-50	10YR 5/6	91	2.0	8.0	6.7	5.7	0.27	<0.12	1.4			250	
9285	mineral	50-75	10YR 4/4	86	3.0	11	7.9	7.4	0.15	<0.090	0.50			290	
9283	mineral	75-100	10YR 6/4	87	1.0	12	8.6	7.7	0.15	< 0.13	1.1			390	
9284	mineral	75-100	10YR 6/4	87	2.0	11	8.7	7.6	0.11	< 0.090	1.0			300	186

SOIL PROFILE INFORMATION (cont'd.)

Site: Earl Rowe Provincial Park

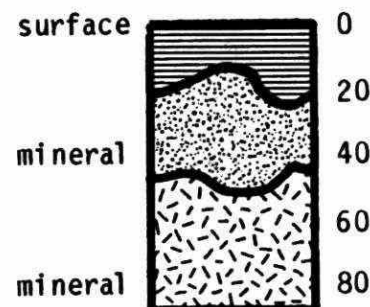
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9292	surface	2200	160	88		13	0.10	0.060		0.31	0.060	0.081	<1.0	73	17	5.8	17
9293	surface	1700	120	63		9.6	0.11	0.070		0.32	0.070	0.077	<1.0	70	20	5.1	17
9289	mineral	340	26	12	2.7	2.1	0.11	0.11	0.0041	0.39	0.12	0.012	<1.0	31	29	8.4	<3.0
9290	mineral	300	29	12	2.7	2.5	0.10	0.10	0.0025	0.32	0.12	0.0060	<1.0	26	27	92	<3.0
9287	mineral	200	17	20		1.2	0.060	0.050	0.0044	0.27	0.070	0.012	<1.0	15	16	130	<3.0
9288	mineral	200	17	24		1.2	0.070	0.060	0.0059	0.25	0.068	0.011	<1.0	17	22	130	3.1
9285	mineral	450	13	28		2.4	0.020	0.010	0.0031	0.20	0.040	0.011	7.0	13	24	100	<3.0
9283	mineral	260	4.0	24		1.4	0.010	0.010	0.0018	0.18	0.030	0.0090	17	11	20	120	<3.0
9284	mineral	260	4.0	24		1.4	0.010	<0.0020	0.0018	0.15	0.020	0.0090	19	12	23	97	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Bruce's Mill Conservation Area

Date: 80/06/25



Location Code: 3001038

UTM: 17T 632700 4866650

Vegetation: maple, birch

Landform: bevelled till plain

Comments: faint mottles at 70 cm. (7.5YR 4/4)

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9300	surface	0-20	5YR 2.5/1	24	28	48	7.0	6.5	5.3	2.9	16			510	
9301	surface	0-20	5YR 2.5/1	41	36	23	7.0	6.5	4.4	2.9	14			410	
9298	mineral	20-40	7.5YR 5/6	43	44	13	7.7	5.9	2.2	1.6	11			500	
9299	mineral	20-40	7.5YR 5/6	43	47	10	6.2	5.4	1.9	0.93	14			310	
9296	mineral	40-60	10YR 5/4	50	27	23	7.2	6.6	0.85	0.39	4.4			420	
9297	mineral	40-60	10YR 5/4	44	39	17	7.4	6.6	1.1	0.66	7.3			420	
9294	mineral	60-80	10YR 6/4	62	14	23	7.6	7.0	0.32	0.26	5.0			580	
9295	mineral	60-80	10YR 6/4	53	25	22	7.6	7.0	0.32	0.27	5.4			500	

SOIL PROFILE INFORMATION (cont'd.)

Site: Bruce's Mill Conservation Area

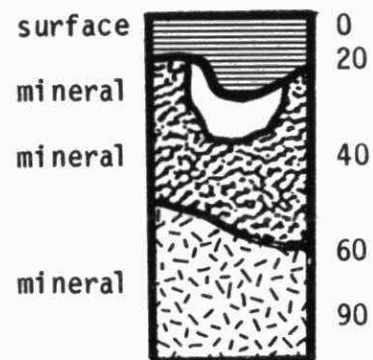
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9300	surface	4000	65	110		21	0.48	0.20	0.022	1.1	0.20	0.040	<1.0	60	30	6.8	22
9301	surface	3400	120	77		18	0.40	0.16	0.015	0.98	0.16	0.029	<1.0	55	22	6.2	20
9298	mineral	1800	74	32		9.5	0.67	0.43	0.0040	1.2	0.55	0.040	<1.0	41	23	7.6	7.6
9299	mineral	1300	81	27		7.2	0.84	0.33	0.0030	1.3	0.43	0.015	<1.0	33	13	5.1	6.9
9296	mineral	920	25	24		4.8	0.050	0.070	0.0015	0.58	0.24	0.025	<1.0	26	21	9.3	6.8
9297	mineral	1200	34	24		6.3	0.21	0.21	0.0038	0.76	0.32	0.028	<1.0	33	24	10	5.3
9294	mineral	1700	65	36		9.1	0.060	0.020	0.0060	0.94	0.097	0.036	<1.0	34	24	15	4.5
9295	mineral	1200	47	32		6.5	0.040	0.020	0.0035	0.81	0.084	0.031	<1.0	31	26	12	3.6

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Whitchurch Conservation Area

Date: 80/06/25



Location Code: 3001039

UTM: 17T 631500 4875550

Vegetation: red pine

Landform: kame moraine

Slope: nearly level

Comments: irregular, discontinuous bleached horizon

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9307	surface	0-20	7.5YR 3/2	92	4.0	4.0	6.3	5.4	1.3	0.73	9.0			340	
9308	surface	0-20	7.5YR 3/2	91	3.0	5.0	6.3	5.5	1.8	0.74	9.4			370	
9306	mineral	20-40	5YR 8/1	90	2.0	8.0	6.9	5.8	0.59	0.18	2.7			100	
9304	mineral	20-40	7.5YR 5/6	92	1.0	8.0	6.9	6.1	0.69	0.24	2.8			290	
9305	mineral	40-60	7.5YR 5/6	94	<1.0	6.0	7.0	6.2	0.59	0.27	2.9			510	
9302	mineral	60-90	10YR 5/6	93	<1.0	7.0	6.9	6.1	0.25	0.26	3.0			540	
9303	mineral	60-90	10YR 5/6	91	<1.0	9.0	7.1	6.1	0.21	<0.11	1.7			380	

SOIL PROFILE INFORMATION (cont'd.)

Site: Whitchurch Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9307	surface	820	43	25	4.6	4.6	0.070	0.080	0.0032	0.35	0.080	0.011	<1.0	37	23	32	7.4
9308	surface	870	38	25	<4.5	4.7	0.10	0.11	0.0056	0.46	0.11	0.014	<1.0	39	8.6	29	10
9306	mineral	600	34	31		3.4	0.10	0.050	0.00090	0.29	0.040	0.0030	<1.0	25	16	110	<3.0
9304	mineral	640	21	16		3.4	0.13	0.14	0.0011	0.37	0.15	0.0040		26	17	66	<3.0
9305	mineral	570	19	16		3.0	0.090	0.13	0.0016	0.31	0.14	0.0050	<1.0	19	11	57	<3.0
9302	mineral	280	6.0	16		1.5	0.050	0.090	0.0044	0.14	0.050	0.0070	<1.0	20	21	3.6	<3.0
9303	mineral	240	6.0	16		1.3	0.050	0.070	0.0052	0.24	0.0040	0.011	<1.0	13	13	3.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Roger's Reservoir Conservation Area Date: 80/06/25

surface 0

Location Code: 3001040

mineral 20

UTM: 17T 623300 4882900

Vegetation: grass

mineral 60

Landform: till plain

mineral 90

Slope: moderate slope

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9313	surface	0-20	10YR 3/2	77	8.0	14	8.1	7.6	1.8	1.4	6.2			460	
9314	surface	0-20	10YR 3/2	75	9.0	16	7.9	7.5	2.8	2.0	7.8			630	
9311	mineral	20-60	10YR 5/3	70	12	18	8.3	7.8	0.64	0.39	6.0			440	
9312	mineral	20-60	10YR 5/3	68	12	20	8.3	7.8	0.65	0.52	7.1			560	
9309	mineral	60-90	10YR 4/3	72	14	14	8.2	7.7	0.72	0.62	6.6			650	
9310	mineral	60-90	10YR 4/3	74	14	13	8.2	7.8	0.64	0.38	8.4			680	

SOIL PROFILE INFORMATION (cont'd.)

Site: Roger's Reservoir Conservation Area

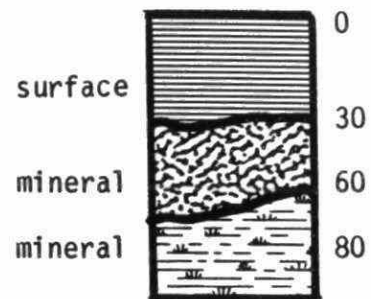
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9313	surface	1600	51	71		8.6	0.030	0.010	0.0026	0.26	0.010	0.0090	35	32	29	47	6.2
9314	surface	1900	77	84		10	0.030	0.010	0.0030	0.26	0.010	0.0090	32	36	26	30	10
9311	mineral	1100	28	32		5.8	0.030	0.010	0.0018	0.28	0.010	0.0090	27	25	22	4.7	<3.0
9312	mineral	1100	28	24		5.8	0.030	0.010	0.0022	0.30	0.020	0.010	27	25	18	33	<3.0
9309	mineral	1200	30	24		6.3	0.040	0.010	0.0016	0.29	0.010	0.0080	16	23	15	3.9	<3.0
9310	mineral	1200	30	24		6.3	0.040	0.020	0.0022	0.24	0.020	0.0070	16	25	22	3.8	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Sibbald Point Provincial Park

Date: 80/06/26



Location Code: 3001041

UTM: 17T 634450 4909600

Vegetation: beech, cedar, pine, birch

Landform: sand plain/beach shoreline

Slope: level

Comments: distinct mottles common at 60-80 cm depth (10YR 5/8), organic mottles at 30-60 cm depth (10YR 2.5/1), white concretions at 60-80 cm depth.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9321	surface	0-30	10YR2.5/1	76	8.0	16	7.8	7.3	3.4		12			640	
9322	surface	0-30	10YR2.5/1	77	8.0	15	7.8	7.2	3.3	1.9	14			670	
9319	mineral	30-40	10YR 5/4	88	3.0	9.0	8.0	7.2	0.67	0.18	6.3			820	
9320	mineral	30-40	10YR 5/4	87	5.0	9.0	7.8	7.2	0.57	0.16	4.9			790	
9317	mineral	40-60	10YR 5/6	82	4.0	13	8.2	7.3	0.47	0.19	5.1			610	
9318	mineral	40-60	10YR 5/6	83	6.0	11	7.2	7.3	0.47	0.18	4.7			810	
9315	mineral	60-80	10YR 6/2	75	6.0	18	8.8	7.9	0.45	0.17	5.9			850	
9316	mineral	60-80	10YR 6/2	87	4.0	9.0	8.9	8.0	0.31	0.19	4.4			850	

SOIL PROFILE INFORMATION (cont'd.)

Site: Sibbald Point Provincial Park

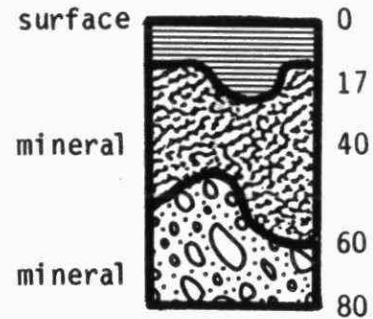
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9321	surface	2300	67	53		12	0.16	0.10	0.0053	0.46	0.22	0.0090	1.0	26	16	2.5	<3.0
9322	surface	2200	67	45		11	0.19	0.12	0.0060	0.45	0.20	0.0090	1.0	22	6.3	2.9	<3.0
9319	mineral	720	24	27		3.8	0.11	0.040	0.0037	0.47	0.090	0.010	1.0	11	7.5	<2.0	<3.0
9320	mineral	550	19	23		3.0	0.13	0.040	0.0042	0.46	0.10	0.017	1.0	13	7.7	2.7	<3.0
9317	mineral	1000	47	36		5.5	0.070	0.020	0.0024	0.88	0.077	0.020	1.0	17	11	6.5	<3.0
9318	mineral	970	48	34		5.3	0.11	0.030	0.0031	0.81	0.10	0.029	1.0	16	19	5.9	<3.0
9315	mineral	610	21	24		3.3	0.010	<0.0020	0.0015	0.23	0.020	0.0040	19	10	8.6	3.2	<3.0
9316	mineral	530	17	24		2.8	0.010	<0.0020	0.0015	0.38	0.027	0.011	18	12	13	4.4	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Hilton Falls Conservation Area

Date: 80/07/18



Location Code: 3001062

UTM: 17T 583000 4817350

Vegetation: maple, beech, white birch,
ironwood

Landform: limestone plain

Slope: complex, gentle slopes

Comments: limestone at 75 cm

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9495	surface	0-17	10YR 3/2	38	45	17	5.6	4.9	3.7	2.8	14			1000	
9496	surface	0-17	10YR 3/2	38	45	17	5.5	4.7	3.8	2.6	14			890	
9493	mineral	17-40	10YR 5/6	41	50	9.0	5.4	4.5	0.67	0.51	13			680	
9494	mineral	17-40	10YR 5/6	42	50	8.0	5.6	4.7	0.67	0.62	11			980	
9491	mineral	40-60	10YR 5/6	48	46	6.0	5.8	4.8	0.36	0.29	11			570	
9492	mineral	40-60	10YR 5/6	45	48	6.0	6.3	5.2	0.31	0.24	5.6			540	
9489	mineral	60-80	5YR 3/4	44	34	21	6.6	5.8	0.19	0.38	4.4			720	
9490	mineral	60-80	5YR 3/4	37	45	18	6.5	5.6	0.20	0.19	3.5			660	

SOIL PROFILE INFORMATION (cont'd.)

Site: Hilton Falls Conservation Area

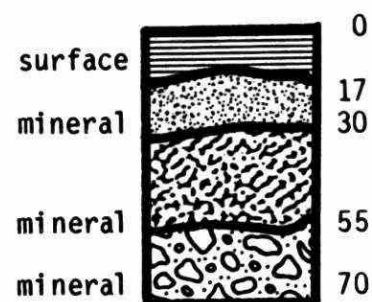
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9495	surface	1200	250	59	64	8.8	0.22	0.11	0.092	0.96	0.22	0.20		110	24	9.7	26
9496	surface	1100	130	83	14	6.9	0.20	0.11	0.092	0.98	0.23	0.18		110	28	9.9	30
9493	mineral	170	37	34	61	1.7	0.14	0.14	0.023	1.1	0.28	0.084		76	35	13	6.3
9494	mineral	640	120	56	33	4.6	0.15	0.16	0.015	1.1	0.31	0.068		70	34	14	5.7
9491	mineral	100	29	47	12	0.96	0.080	0.090	0.011	0.73	0.17	0.070		43	35	13	5.2
9492	mineral	170	43	34	2.6	1.3	0.060	0.070	0.012	0.74	0.15	0.072	<1.0	41	25	12	5.4
9489	mineral	560	220	20		4.6	0.070	0.020	0.0053	1.3	0.14	0.11	<1.0	66	45	16	6.3
9490	mineral	520	200	22		4.2	0.060	0.020	0.0028	1.2	0.13	0.10	<1.0	62	47	17	4.9

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Silent Lake Provincial Park

Date: 80/07/23



Location Code: 4001072

UTM: 17T 730950 4977950

Vegetation: white pine, white birch, sugar maple

Landform: shallow till and rock ridges

Slope: very gentle slope

Comments: very stoney at 55-70 cm stones throughout profile

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9566	surface	0-17	10YR 3/3	62	32	6.0	5.4	4.6	2.8	1.7	15			1000	
9567	surface	0-17	10YR 3/3	69	25	6.0	5.3	4.6	3.2	1.8	13			1000	
9564	mineral	17-30	10YR 5/8	60	37	3.0	5.4	4.7	1.9	1.1	5.8			1100	
9565	mineral	17-30	10YR 5/8	61	36	3.0	5.4	4.7	1.8	0.92	6.8			1000	
9562	mineral	30-45	10YR 5/6	71	26	3.0	5.7	4.8	1.1	0.59	5.2			1000	
9563	mineral	30-45	10YR 5/6	62	36	2.0	5.5	4.7	1.4	0.70	5.2			1000	
9560	mineral	45-55	10YR 5/6	80	16	4.0	5.7	4.8	0.73	0.36	3.6			960	
9561	mineral	45-55	10YR 5/6	74	22	4.0	5.6	4.8	0.77	0.44	4.4			960	
9558	mineral	55-70	10YR 7/2	84	13	4.0	5.8	5.0	0.25	<0.11	2.6			910	
9559	mineral	55-70	10YR 7/2	80	16	4.0	5.9	5.0	0.21	<0.11	2.4			930	

SOIL PROFILE INFORMATION (cont'd.)

Site: Silent Lake Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9566	surface	150	13	120	36	1.5	0.22	0.42	0.015	1.1	0.54	0.033		50	17	6.1	11
9567	surface	170	13	130	41	1.7	0.24	0.47	0.016	1.2	0.59	0.038		53	17	5.8	12
9564	mineral	64	2.2	50	15	0.60	0.15	0.44	0.0012	0.94	0.68	0.0080		38	9.2	7.3	<3.0
9565	mineral	74	2.2	45	13	0.63	0.14	0.44	0.0012	0.92	0.66	0.0070		36	9.7	6.8	<3.0
9562	mineral	53	2.2	40	11	<0.50	0.080	0.23	0.00070	0.58	0.41	0.0040		34	15	8.7	<3.0
9563	mineral	42	2.2	40	14	<0.50	0.070	0.18	0.00050	0.54	0.45	0.0030		30	11	6.2	<3.0
9560	mineral	42	2.4	45	9.0	<0.50	0.050	0.15	0.00040	0.43	0.26	0.0020		30	21	9.7	<3.0
9561	mineral	53	2.2	45	10	<0.50	0.050	0.15	0.00040	0.48	0.33	0.0030		30	18	8.9	<3.0
9558	mineral	21	2.4	50	5.0	<0.50	0.010	0.070	0.00040	0.28	0.11	0.0050		24	33	7.7	<3.0
9559	mineral	21	2.4	55	5.0	<0.50	0.010	0.060	0.00040	0.28	0.11	0.0060		23	37	8.1	<3.0

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Darlington Provincial Park	Date: 80/07/29
surface	0	Location Code: 3001073	
mineral	30	UTM: 17T 678500 4860200	Vegetation: pine reforested
mineral	50	Landform: clay plain	
	80	Slope: level	Comments: evidence of plowing

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9584	surface	0-10	10YR 3/2	39	30	32	6.2	5.5	2.8	1.7	17			720	
9585	surface	0-10	10YR 3/2	33	36	30	6.2	5.6	3.0	1.4	15			670	
9582	surface	10-30	10YR 4/2	27	36	37	6.6	6.0	1.3	0.87	12			660	
9583	surface	10-30	10YR 4/2	35	32	32	6.5	5.9	1.3	0.94	12			610	
9580	mineral	30-50	10YR 5/4	20	33	46	7.0	6.5	0.69	0.51	14			800	
9581	mineral	30-50	10YR 5/4	21	33	46	7.0	6.4	0.49	0.44	13			770	
9578	mineral	50+	10YR 4/3	8.0	35	57	7.5	7.1	0.47	0.66	24			1100	
9579	mineral	50+	10YR 4/3	9.0	33	59	7.5	7.1	0.47	0.53	25			1000	

SOIL PROFILE INFORMATION (cont'd.)

Site: Darlington Provincial Park

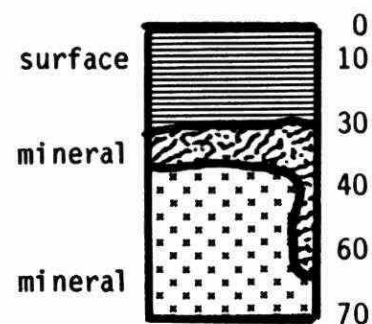
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9584	surface	1900	130	100		11	0.12	0.050	0.014	0.82	0.11	0.029	<1.0	64	14	15	22
9585	surface	1800	130	100		10	0.13	0.050	0.015	0.87	0.11	0.031	<1.0	64	14	15	27
9582	surface	2100	140	70		12	0.13	0.050	0.0066	1.1	0.13	0.040	<1.0	65	18	21	8.7
9583	surface	1800	120	65		10	0.12	0.050	0.0076	0.86	0.11	0.030	<1.0	56	14	15	8.5
9580	mineral	2800	160	55		15	0.10	0.040	0.0038	1.1	0.13	0.039	<1.0	71	22	25	7.5
9581	mineral	3000	180	58		17	0.090	0.030	0.0034	1.1	0.13	0.040	<1.0	69	22	27	5.5
9578	mineral	4200	240	100		23	0.020	0.010	0.0024	1.1	0.13	0.047	1.0	100	35	38	8.5
9579	mineral	4000	200	88		22	0.040	0.030	0.0036	1.2	0.14	0.047	1.0	95	34	37	9.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Enniskillen Conservation Area

Date: 80/07/29



Location Code: 3001074

UTM: 17T 677850 4874800

Vegetation: pine, fir, grass

Landform: drumlin

Slope: moderate slopes

Comments: white chalk, carbonate concretions at depth

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9594	surface	0-10	10YR 3/2	66	21	13	8.2	7.6	1.4	1.1	11			780	
9595	surface	0-10	10YR 3/2	62	25	13	8.2	7.6	1.1	0.89	7.8			530	
9592	surface	10-30	10YR 3/3	61	27	12	8.3	7.7	1.1	0.85	8.2			720	
9593	surface	10-30	10YR 3/3	58	27	15	8.2	7.7	0.78	0.66	6.9			680	
9590	mineral	30-40	7.5Y 4/4	56	29	15	8.5	7.8	0.53	0.42	5.4			860	
9591	mineral	30-40	7.5Y 4/4	54	31	16	8.3	7.8	0.49	0.33	6.4			710	
9588	mineral	40-60	2.5Y 6/2	69	18	13	9.0	8.0	0.19	<0.13	2.3			380	
9589	mineral	40-60	2.5Y 6/2	64	25	12	8.9	7.9	0.23	0.16	3.9			490	
9586	mineral	60+	2.5Y 6/2	67	24	9.0	9.0	7.8	0.15	<0.13	2.5			470	
9587	mineral	60+	2.5Y 6/2	62	25	13	9.0	7.9	0.17	<0.14	3.3			450	

SOIL PROFILE INFORMATION (cont'd.)

Site: Enniskillen Conservation Area

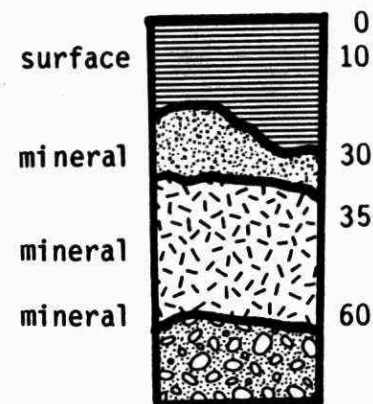
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9594	surface	1400	27	67		7.4	0.030	0.030	0.0076	0.52	0.070	0.026	4.0	35	4.6	5.0	7.1
9595	surface	1400	18	38		7.2	0.030	0.030	0.0054	0.58	0.080	0.030	4.0	37	4.9	5.2	6.0
9592	surface	1500	13	23		7.5	0.040	0.030	0.0067	0.65	0.090	0.031	5.0	33	4.4	5.6	5.5
9593	surface	1300	13	13		6.8	0.040	0.13	0.0071	0.59	0.080	0.028	4.0	33	5.0	5.4	4.7
9590	mineral	1300	11	16		6.8	0.030	0.020	0.0033	0.82	0.090	0.037	8.0	31	8.0	9.3	3.2
9591	mineral	1200	6.7	14		6.2	0.080	0.040	0.0035	0.75	0.10	0.036	2.0	35	6.0	7.8	<3.0
9588	mineral	510	1.0	10		2.6	<0.0003	<0.0020	0.0011	0.28	0.020	0.014	42	16	5.9	4.3	<3.0
9589	mineral	660	4.5	9.0		3.4	<0.0003	<0.0020	0.0011	0.31	0.030	0.016	37	17	6.1	5.0	<3.0
9586	mineral	460	1.0	7.0		2.3	<0.0003	<0.0020	0.0010	0.23	0.020	0.011	36	13	5.5	3.1	3.3
9587	mineral	540	2.9	7.0		2.7	<0.0003	<0.0020	0.00090	0.25	0.020	0.013	39	14	5.8	4.2	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Glenn Haffy Conservation Area

Date: 80/08/07



Location Code: 3001075

UTM: 17T 583850 4865600

Vegetation: beech, maple, pine, oak

Landform: kame moraine

Slope: nearly level

Comments: stoney at 50-60 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9604	surface	0-10	10YR 3/2	24	54	22	5.3	4.5	9.5	5.0	21			670	
9605	surface	0-10	10YR 3/2	24	50	25	5.2	4.4	9.1	5.6	20			710	
9602	surface	10-30	10YR 3/2	24	57	18	5.4	4.5	3.9	2.7	13			460	
9603	surface	10-30	10YR 3/2	26	55	19	5.5	4.6	4.5	2.8	14			480	
9600	mineral	30-35	10YR 4/3	34	53	13	6.1	5.0	1.8	1.3	6.8			430	
9601	mineral	30-35	10YR 4/3	32	55	13	6.0	5.1	1.9	1.1	7.5			400	
9598	mineral	35-60	10YR 6/4	48	44	7.0	6.6	5.4	0.57	0.37	4.5			620	
9599	mineral	35-60	10YR 6/4	53	36	11	6.6	5.6	0.37	0.21	4.1			620	
9596	mineral	60+	10YR 6/3	51	36	13	7.2	6.1	0.25	0.27	4.2			580	204
9597	mineral	60+	10YR 6/3	53	26	20	7.0	6.3	0.29	0.38	5.9			630	

SOIL PROFILE INFORMATION (cont'd.)

Site: Glenn Haffy Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9604	surface	2000	200	73	37	12	0.43	0.23	0.014	1.1	0.25	0.024		58	9.3	6.7	27
9605	surface	2000	200	73	48	12	0.43	0.23	0.012	1.2	0.27	0.025		52	9.0	6.1	24
9602	surface	1400	140	27	45	8.6	0.55	0.29	0.0072	1.3	0.31	0.015		46	6.7	4.8	9.2
9603	surface	1400	140	27	37	8.6	0.54	0.29	0.0071	1.1	0.30	0.013		47	7.0	5.4	9.1
9600	mineral	890	81	9.0	8.9	5.2	0.42	0.34	0.0037	1.1	0.38	0.014		45	7.1	8.3	4.0
9601	mineral	930	93	9.0	9.1	5.5	0.45	0.33	0.0031	1.1	0.38	0.013	<1.0	49	8.3	8.3	5.0
9598	mineral	470	64	<2.0	2.6	3.1	0.16	0.15	0.0051	0.78	0.20	0.024	<1.0	23	6.5	6.8	<3.0
9599	mineral	290	27	6.7		1.7	0.10	0.090	0.0032	0.65	0.13	0.022	<1.0	19	7.8	6.2	<3.0
9596	mineral	670	62	12		3.9	0.090	0.040	0.0041	0.94	0.12	0.064	<1.0	27	17	8.2	3.9
9597	mineral	1200	110	19		7.1	0.15	0.050	0.0039	1.6	0.19	0.15	<1.0	43	35	15	6.4

SOIL PROFILE INFORMATION

Horizon Depth (cm)

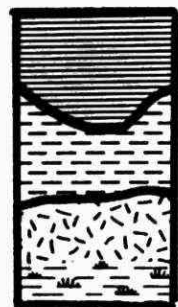
Site: Heart Lake Conservation Area

Date: 80/08/07

surface

mineral

mineral



0

35

50

60

80

Location Code: 3001076

UTM: 17T 596950 4843850

Landform: till plain

Slope: gentle slope

Vegetation: beech, pine, maple

Comments: faint mottling at 70 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9614	surface	0-10	10YR 3/2	27	36	36	7.0	6.4	4.6	3.7	13			560	
9615	surface	0-10	10YR 3/2	28	37	35	6.8	6.2	3.9	2.7	16			570	
9612	surface	10-35	10YR 4/3	33	38	29	7.2	6.6	3.7	1.7	10			510	
9613	surface	10-35	10YR 4/3	35	38	28	7.2	6.5	2.0	1.2	8.6			420	
9610	mineral	35-50	10YR 3/3	15	39	46	7.2	6.7	3.3	2.4	17			760	
9611	mineral	35-50	10YR 3/3	16	35	49	7.2	6.7	2.7	2.2	16			740	
9608	mineral	50-60	10YR 6/3	32	42	26	7.5	6.8	0.49	0.53	8.3			380	
9609	mineral	50-60	10YR 6/3	29	41	30	7.4	6.8	0.53	0.66	7.0			470	
9606	mineral	60-80	10YR 5/3	27	38	35	7.3	6.8	0.39	0.50	9.1			470	
9607	mineral	60-80	10YR 5/3	33	37	30	7.3	6.9	0.35	0.49	9.0			600	

SOIL PROFILE INFORMATION (cont'd.)

Site: Heart Lake Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9614	surface	3100	260	120		18	0.23	0.090	0.059	1.1	0.16	0.079	<1.0	93	23	20	25
9615	surface	2800	240	100		16	0.21	0.080	0.047	1.1	0.16	0.080	<1.0	8.4	21	18	22
9612	surface	2200	180	72		13	0.21	0.10	0.025	1.1	0.17	0.087	<1.0	73	20	17	9.8
9613	surface	2000	162	67		11	0.22	0.090	0.023	1.1	0.16	0.087	<1.0	67	19	16	9.3
9610	mineral	3400	330	87		20	0.36	0.16	0.051	1.8	0.30	0.27	<1.0	99	35	30	10
9611	mineral	3300	330	84		19	0.37	0.16	0.052	1.9	0.32	0.30	<1.0	100	34	29	11
9608	mineral	1700	160	54		9.9	0.14	0.050	0.0064	1.5	0.16	0.15	<1.0	59	22	21	8.8
9609	mineral	1600	170	54		9.4	0.15	0.050	0.0063	1.5	0.16	0.11	<1.0	65	26	21	8.9
9606	mineral	1700	140	56		10	0.010	0.030	0.0029	1.7	0.17	0.085	<1.0	68	32	25	7.7
9607	mineral	1600	170	54		9.4	0.10	0.030	0.0047	1.6	0.17	0.10	<1.0	65	33	26	7.9

SOIL PROFILE INFORMATION

Horizon	Depth (cm)
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Site: Watershed B, Dorset

Date: 80/08/19

Location Code: 3001088

UTM: 17T 662350 5010350

Vegetation: maple

Landform: shallow till and rock ridge

Slope: strong slopes

Comments: exceedingly stoney (granitic)

Horizon	Dep
surface	0
mineral	5
	80

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9731	surface	0-5	7.5YR 3/2	54	39	7.0	5.6	4.6	3.8	2.4	9.6			650	
9732	surface	0-5	7.5YR 3/2	56	36	8.0	6.0	5.0	3.9	2.0	8.7			580	
9729	mineral	5-30	7.5YR 4/4	59	36	6.0	5.9	4.8	2.4	1.4	5.4			700	
9730	mineral	5-30	7.5YR 4/4	58	38	4.0	5.8	4.8	2.5	1.5	6.2			890	
9727	mineral	30-50	7.5YR 4/4	60	36	4.0	5.7	4.7	1.8	1.3	5.5			1300	
9728	mineral	30-50	7.5YR 4/4	56	38	6.0	5.8	4.7	1.9	1.3	5.7			650	
9725	mineral	50-80	7.5YR 4/4	48	45	7.0	5.7	4.7	1.9	1.2	6.5			3700	
9726	mineral	50-80	7.5YR 4/4	53	42	4.0	5.7	4.7	1.7	1.1	4.3			2400	

SOIL PROFILE INFORMATION (cont'd.)

Site: Watershed B, Dorset

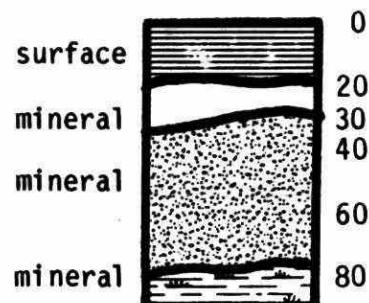
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9731	surface	500	39	43	33	3.3	0.44	0.38	0.026	1.7	0.79	0.042		300	24	15	6.8
9732	surface	1100	66	49	8.0	6.1	0.40	0.35	0.045	1.7	0.68	0.059		300	16	16	7.5
9729	mineral	260	17	18	26	1.7	0.40	0.47	0.0061	1.6	0.81	0.020		260	26	18	5.3
9730	mineral	300	17	18	22	1.9	0.38	0.47	0.0032	1.5	0.87	0.011		210	21	17	4.9
9727	mineral	180	12	18	33	1.4	0.40	0.34	0.0036	1.4	0.71	0.016		230	20	14	4.5
9728	mineral	210	12	18	25	1.5	0.33	0.32	0.0040	1.4	0.73	0.017		230	18	15	3.5
9725	mineral	170	17	18	35	1.4	0.49	0.40	0.0026	1.6	0.78	0.012		190	120	13	4.6
9726	mineral	170	12	18	36	1.4	0.44	0.39	0.0023	1.5	0.75	0.011		210	24	15	5.7

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Paint Lake, Dorset

Date: 80/08/19



Location Code: 3001089

UTM: 17T 662250 5009750

Vegetation: grass, pine

Landform: shallow till and rock ridge

Slope: level

Comments: discontinuous, irregular bleached horizon, faint mottling at 80+ cm (10YR 5/8)

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9742	surface	0-20	10YR 3/3	73	22	5.0	6.0	4.8	2.1	1.2	6.9			290	
9743	surface	0-20	10YR 3/3	72	22	5.0	6.0	4.9	1.9	1.2	6.7			250	
9741	mineral	20-30	10YR 6/2	78	18	4.0	6.5	5.1	0.60	0.34	2.4			90	
9739	mineral	30-40	5YR 3/3	84	13	3.0	6.2	5.0	2.2	0.94	7.3			220	
9740	mineral	30-40	5YR 3/3	82	15	4.0	6.1	4.9	2.1	1.1	3.0			260	
9737	mineral	40-60	10YR 5/8	85	15	<1.0	6.0	4.9	0.98	0.52	2.1			500	
9738	mineral	40-60	10YR 5/8	84	11	5.0	5.8	5.0	0.88	0.47	2.4			550	
9735	mineral	60-80	10YR 5/6	82	16	2.0	6.0	4.8	1.1	0.36	2.4			480	
9736	mineral	60-80	10YR 5/6	72	25	3.0	5.9	4.8	0.97	0.51	2.7			570	
9733	mineral	80+	2.5Y 4/2	46	51	3.0	6.0	4.9	0.51	0.22	2.1			750	
9734	mineral	80+	2.5Y 4/2	38	58	4.0	5.8	4.9	0.27	0.18	1.3			870	210

SOIL PROFILE INFORMATION (cont'd.)

Site: Paint Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9742	surface	380	12	12	7.0	2.1	0.39	0.25	0.0036	1.0	0.45	0.0070		26	11	2.6	3.8
9743	surface	470	9.0	32	17	2.7	0.37	0.21	0.0035	0.97	0.44	0.0060		27	8.7	2.8	<3.0
9741	mineral	310	12	6.0	3.0	1.7	0.11	0.070	0.00070	0.31	0.10	0.0020		6.8	6.5	<2.0	<3.0
9739	mineral	370	7.0	6.0	9.0	2.0	0.46	0.50	0.00040	0.77	0.82	0.0020		13	11	<2.0	<3.0
9740	mineral	370	7.0	6.0	12	2.1	0.45	0.48	0.00040	0.79	0.81	0.0010		18	12	<2.0	<3.0
9737	mineral	130	2.0	6.0	13	0.82	0.23	0.35	0.00060	0.81	0.57	0.0030		35	12	7.0	<3.0
9738	mineral	170	2.0	6.0	10	0.98	0.22	0.30	0.00080	0.76	0.53	0.0030		37	10	7.4	<3.0
9735	mineral	96	5.0	6.0	16	0.69	0.26	0.32	0.00060	1.1	0.65	0.0040		39	13	9.2	<3.0
9736	mineral	120	5.0	6.0	18	0.83	0.25	0.25	0.00050	0.76	0.52	0.0030		27	12	5.5	<3.0
9733	mineral	72	2.2	18	11	0.54	0.20	0.20	0.00060	0.67	0.25	0.0010		33	14	8.7	<3.0
9734	mineral	60	2.0	24	15	0.53	0.080	0.12	0.00050	0.55	0.15	0.0040		34	15	8.5	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Plastic Lake, Dorset

Date: 80/08/19

surface 0

Location Code: 3001090

mineral 10

UTM: 17T 670700 5004950

Vegetation: maple, beech, pine

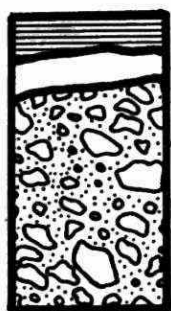
mineral 20

Landform: shallow till and rock ridges

mineral 30

Slope: moderate slope

Comments: depth to granitic bedrock 55 cm
exceedingly stoney. Organic
contamination in sampling
bleached horizon at 10-20 cm.



50
55

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9751	surface	0-10	5YR 3/2	57	31	13	4.5	3.6	11	4.2	22			290	
9752	surface	0-10	5YR 3/2	60	29	12	4.8	3.8	6.5	2.9	18			290	
9750	mineral	10-20	5YR 7/1	66	28	5.0	5.0	4.1	1.4	0.53	5.0			110	
9748	mineral	20-30	10YR 4/3	73	23	4.0	5.3	4.6	2.8	1.7	6.0			390	
9749	mineral	20-30	10YR 4/3	70	32	2.0	5.3	4.6	3.2	1.5	6.9			360	
9746	mineral	30-50	5YR 4/4	70	26	3.0	5.5	4.7	2.2	1.1	9.4			360	
9747	mineral	30-50	5YR 4/4	70	27	3.0	5.4	4.7	2.3	1.3	6.5			400	
9744	mineral	50-55	5YR 4/4	80	17	3.0	5.4	4.7	1.4	0.81	7.0			410	
9745	mineral	50-55	5YR 4/4	74	24	3.0	5.4	4.7	1.9	0.91	6.5			320	

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, Dorset

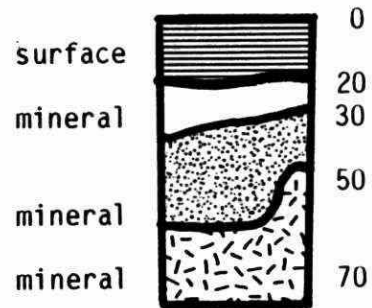
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9751	surface	1400	140	110	86	9.3	0.21	0.070	0.0081	0.56	0.11	0.0080		56	24	5.7	47
9752	surface	870	91	110	160	6.9	0.25	0.11	0.0047	0.76	0.18	0.0060		42	27	4.8	29
9750	mineral	210	23	22	110	2.4	0.22	0.070	0.00040	0.62	0.11	0.0010		15	7.0	<2.0	4.2
9748	mineral	88	9.0	22	25	0.81	0.33	0.69	0.00080	1.9	1.3	0.0040		53	8.8	8.1	<3.0
9749	mineral	88	13	27	38	1.0	0.49	0.92	0.0014	1.8	1.4	0.0040		49	12	7.3	3.1
9746	mineral	99	9.0	16	20	0.81	0.28	0.62	0.00050	1.5	0.96	0.0030		46	12	9.8	<3.0
9747	mineral	99	9.0	22	20	0.82	0.23	0.58	0.00040	1.6	1.1	0.0030		45	12	8.7	<3.0
9744	mineral	140	4.5	11	16	0.92	0.15	0.23	0.00040	0.83	0.59	0.0020		35	16	8.7	<3.0
9745	mineral	79	4.5	11	20	0.65	0.20	0.51	0.00040	1.2	0.83	0.0020		41	14	9.2	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Arrowhead Provincial Park

Date: 80/08/20



Location Code: 3001091

UTM: 17T 640000 5028000

Vegetation: pine, spruce, maple

Landform: sand plain

Slope: very gentle slopes

Comments:

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9759	surface	0-20	10YR2.5/1				4.3	3.8	26	11				440	
9760	surface	0-20	10YR2.5/1				4.0	3.4	25	9.0	57			360	
9757	mineral	20-30	5YR 6/1	84	14	2.0	4.6	3.7	0.56	0.26	3.1			70	
9758	mineral	20-30	5YR 6/1	87	9.0	4.0	4.6	3.7	0.41	0.45	2.0			50	
9755	mineral	30-50	2.5YR 2.5/4	93	4.0	3.0	5.2	4.3	2.1	1.4	4.2			480	
9756	mineral	30-50	2.5YR 2.5/4	89	7.0	4.0	5.2	4.3	2.2	1.2	2.8			380	
9753	mineral	50-70	7.5YR 4/4	96	3.0	1.0	5.5	4.5	0.40	0.23	1.4			500	
9754	mineral	50-70	7.5YR 4/4	94	2.0	4.0	5.5	4.6	0.56	0.24	2.0			360	

SOIL PROFILE INFORMATION (cont'd.)

Site: Arrowhead Provincial Park

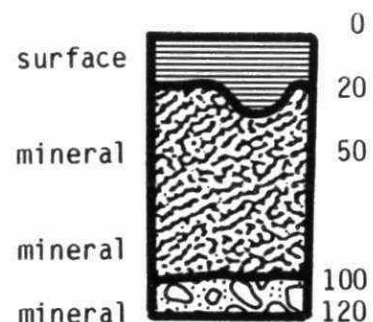
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9759	surface	380	360	250	11	5.5	0.070	0.050	0.013	0.25	0.055	0.012		58	36	11	74
9760	surface	300	230	54	530	8.8	0.050	0.040	0.0073	0.20	0.049	0.0070		53	30	13	88
9757	mineral	67	10	9.0	27	0.71	0.030	0.010	0.00040	0.18	0.014	0.00090		4.9	5.4	<2.0	<3.0
9758	mineral	67	10	14	33	0.78	0.050	0.020	0.00040	0.23	0.023	0.0020		7.2	7.8	<2.0	<3.0
9755	mineral	180	13	5.0	120	2.3	0.69	0.59	0.00070	1.0	0.60	0.0030		23	8.3	2.6	<3.0
9756	mineral	170	13	11	110	2.1	0.90	0.57	0.00070	1.2	0.57	0.0030		23	9.9	3.1	<3.0
9753	mineral		9.0	11	22		0.050	0.13	0.00040	0.20	0.20	0.0010		19	12	6.2	<3.0
9754	mineral	59	5.0	5.0	21	0.55	0.050	0.13	0.00040	0.24	0.29	0.0030		16	8.7	5.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Six Mile Lake Provincial Park

Date: 80/08/21



Location Code: 3001093

UTM: 17T 598750 4971150

Vegetation: pine, ferns, shrubs

Landform: shallow till and rock ridges

Slope: nearly level

Comments: slightly stoney in the mineral horizons, evidence of past disturbance

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9781	surface	0-20	10YR 3/2	62	24	14	5.9	5.1	7.0	2.4	10			600	
9782	surface	0-20	10YR 3/2	63	24	13	5.8	4.9	5.9	2.1	10			550	
9779	mineral	20-50	10YR 4/4	59	32	9.0	5.8	4.8	1.5	0.62	6.7			440	
9780	mineral	20-50	10YR 4/4	61	26	14	5.8	4.8	1.1	0.70	6.0			380	
9777	mineral	50-80	10YR 5/6	66	24	10	5.7	4.7	1.6	0.56	7.1			470	
9778	mineral	50-80	10YR 5/6	50	34	16	5.8	4.7	1.6	0.59	7.0			470	
9775	mineral	80-100	10YR 5/6	78	15	8.0	6.1	5.1	0.25	0.30	4.4			640	
9776	mineral	80-100	10YR 5/6	80	15	5.0	6.0	5.0	0.57	0.24	5.2			580	
9773	mineral	100-120	10YR 6/3	86	11	2.0	6.1	5.2	0.44	0.21	4.5			460	
9774	mineral	100-120	10YR 6/3	91	7.0	3.0	6.2	5.2	0.25	0.17	0.50			560	

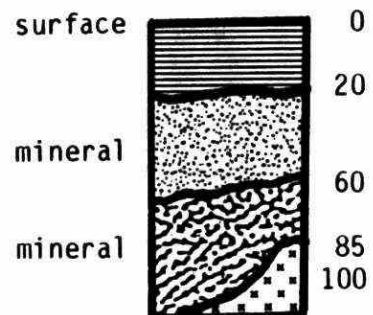
SOIL PROFILE INFORMATION (cont'd.)

Site: Six Mile Lake Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9781	surface	1400	160	80	18	8.7	0.24	0.31	0.041	0.83	0.37	0.041	<1.0	91	13	13	26
9782	surface	1400	130	140	16	8.7	0.22	0.30	0.032	0.74	0.32	0.031		82	13	12	20
9779	mineral	280	41	43	41	2.2	0.080	0.10	0.00060	0.39	0.19	0.0010		29	14	5.7	<3.0
9780	mineral		41	43	38		0.090	0.14	0.00050	0.38	0.17	0.0020		41	10	9.7	<3.0
9777	mineral	220	36	60	64	2.2	0.18	0.24	0.00090	0.65	0.29	0.0020		44	14	12	<3.0
9778	mineral	280	36	43	53	2.3	0.18	0.24	0.0011	0.74	0.33	0.0030		47	12	12	<3.0
9775	mineral	110	13	49	15	0.92	0.11	0.18	0.00040	0.51	0.26	0.0030		39	14	13	<3.0
9776	mineral	240	18	49	19	1.7	0.090	0.15	0.00040	0.46	0.23	0.0010		33	19	11	<3.0
9773	mineral	99	4.5	19	5.0	0.63	0.040	0.13	0.00040	0.16	0.16	0.00080		15	7.7	5.5	<3.0
9774	mineral	69	4.5	11	4.5	<0.50	0.020	0.12	0.00040	0.12	0.14	0.00080		13	6.7	4.9	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)



Site: MNR York Region Forest, North Tract-
Ballantrae

Location Code: 3001121

UTM: 17T 635300 4875850

Landform: kame moraine

Slope: very gentle slopes

Date: 80/10/30

Vegetation: red pine

Comments: reforested area

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9991	surface	0-20	10YR2.5/1	88	8.0	4.0	4.9	4.0	2.2	1.1	13			450	
9992	surface	0-20	10YR2.5/1	83	5.0	12	5.1	4.2	3.3	1.4	18			470	
9989	mineral	20-60	7.5YR 5/6	91	9.0	<1.0	6.3	5.4	0.63	0.40	7.3			540	
9990	mineral	20-60	7.5YR 5/6	92	4.0	4.0	6.0	5.1	0.63	0.61	7.2			560	
9987	mineral	60-75	7.5YR 5/6	95	4.0	1.0	6.6	5.7	0.52	0.47	7.9			710	
9988	mineral	60-75	7.5YR 5/6	96	<1.0	4.0	6.7	5.9	0.37	0.27	6.1			450	
9985	mineral	75-85	10YR 5/6	94	2.0	4.0	6.8	5.8	0.36	0.32	7.1			730	
9986	mineral	75-85	10YR 5/6	96	3.0	<1.0	6.8	5.9	0.60	0.35	6.5			610	
9983	mineral	85-100	10YR 6/3	100	<1.0	<1.0	8.6	7.8	0.070	0.19	3.0			460	
9984	mineral	85-100	10YR 6/3	100	<1.0	<1.0	8.4	7.7	0.050	0.13	4.4			360	

SOIL PROFILE INFORMATION (cont'd.)

Site: MNR York Region Forest, North Tract - Ballantrae

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9991	surface	660	27	32	73	4.3	0.14	0.090	0.010	0.42	0.10	0.013		38	29	36	16
9992	surface	620	36	32	43	3.9	0.11	0.090	0.016	0.38	0.090	0.017		34	11	5.0	18
9989	mineral	540	32	11	4.0	3.0	0.24	0.14	0.0072	0.47	0.15	0.011	<1.0	27	27	19	<3.0
9990	mineral	550	27	16	6.0	3.1	0.15	0.080	0.0042	0.46	0.12	0.012	<1.0	24	32	28	<3.0
9987	mineral	510	21	7.1		2.7	0.18	0.17	0.0078	0.60	0.22	0.016	<1.0	30	34	26	8.9
9988	mineral	510	18	4.3		2.7	0.16	0.12	0.0086	0.51	0.16	0.014	<1.0	29	39	25	3.7
9985	mineral	410	14	10		2.2	0.10	0.15	0.0098	0.42	0.18	0.017	<1.0	18	15	62	4.7
9986	mineral	500	14	7.1		2.6	0.13	0.19	0.011	0.55	0.24	0.021	<1.0	24	33	39	8.3
9983	mineral	290	4.6	7.1		1.5	0.010	0.010	0.0017	0.24	0.040	0.010	35	15	15	53	<3.0
9984	mineral	330	4.6	7.1		1.7	0.020	0.010	0.0018	0.25	0.040	0.011	32	14	10	63	4.6

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Greenwood Conservation Area	Date: 80/07/29
surface	0	Location Code: 3001122	
mineral	32	UTM: 17T 655600 4862350	Vegetation: pine, sumac, maple, grass
mineral	50	Landform: sand plain/beach	
	70	Slope: moderate slope	Comments: large rounded granitic boulders throughout pit
	90		

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9576	surface	0-10	10YR 3/2	74	11	15	8.0	7.4	1.4	0.79	6.6			770	
9577	surface	0-10	10YR 3/2	70	12	18	8.0	7.4	1.8	0.92	7.6			830	
9574	surface	10-32	10YR 3/2	73	13	14	7.7	7.1	1.0	0.61	6.0			830	
9575	surface	10-32	10YR 3/2	71	14	14	7.8	7.2	1.3	0.80	6.7			780	
9572	mineral	32-50	7.5YR 4/4	79	11	10	7.7	7.1	0.51	0.29	5.9			670	
9573	mineral	32-50	7.5YR 4/4	76	13	11	7.8	7.1	0.59	0.41	5.5			740	
9570	mineral	50-70	10YR 5/6	89	4.0	7.0	8.1	7.4	0.33	<0.10	3.2			690	
9571	mineral	50-70	10YR 5/6	88	2.0	11	8.0	7.2	0.15	<0.11	3.6			790	
9568	mineral	70-90	7.5YR 6/2	90	1.0	9.0	8.9	7.7	0.19	<0.09	2.1			280	
9569	mineral	70-90	7.5YR 6/2	90	<1.0	10	8.9	7.8	0.090	<0.11	2.2			240	220

SOIL PROFILE INFORMATION (cont'd.)

Site: Greenwood Conservation Area

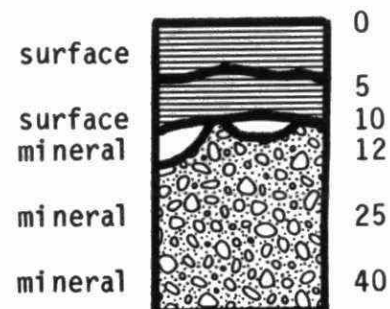
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9576	surface	1400	17	40		7.1	0.060	0.050	0.010	0.76	0.13	0.048		54	6.9	34	13
9577	surface	1300	17	40		6.9	0.070	0.060	0.011	1.0	0.18	0.062	5.0	66	8.2	9.0	16
9574	surface	1100	14	35		5.9	0.10	0.080	0.0079	0.83	0.16	0.055	4.0	56	6.5	6.9	8.7
9575	surface	1300	17	40		6.9	0.060	0.060	0.011	0.95	0.17	0.065	4.0	59	6.7	6.9	10
9572	mineral	950	14	25		4.9	0.080	0.070	0.0050	0.79	0.16	0.034	7.0	44	6.8	5.6	6.1
9573	mineral	1000	14	30		5.2	0.070	0.060	0.0037	0.84	0.17	0.59	5.0	54	6.7	7.6	6.5
9570	mineral	470	6.7	15		2.4	0.020	0.010	0.0030	0.31	0.050	0.017	2.0	15	3.8	4.8	3.4
9571	mineral	430	8.7	15		2.3	0.020	0.010	0.0015	0.37	0.060	0.019	3.0	16	3.6	5.7	<3.0
9568	mineral	430	1.0	5.0		2.2	0.010	0.010	0.00090	0.22	0.040	0.011	25	11	5.9	140	3.1
9569	mineral	430	2.9	7.0		2.2	0.010	0.010	0.0010	0.19	0.030	0.010	25	9.4	4.6	100	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Plastic Lake, Dorset

Date: 81/05/14



Location Code: 3001124

UTM: 17T 640750 5004750

Vegetation: oak

Landform: shallow till and rock ridges

Slope: level

Comments: north of 1981 biogeochemical site

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17161	surface	5-10	10YR 2/1	47	28	25	4.1	3.6	7.0	5.3					
17160	surface	5-10	10YR 2/1	57	25	18	3.9	3.4	4.0	2.5			9.0		21
17159	mineral	10-12	5YR 4/2	59	29	11	4.1	3.5	2.0	0.70			23		31
17158	mineral	12-25	10YR 3/6	57	32	11	4.9	4.5	5.0	2.2			5.0		8.9
17157	mineral	12-25	10YR 3/6	51	40	10	5.0	4.5	4.0	2.2			<3.0		7.8
17156	mineral	25-40	10YR 3/6	55	31	14	4.8	4.2	6.0	2.5			23		14
17155	mineral	25-40	10YR 3/6	47	40	13	4.8	4.2	6.0	3.0			27		16

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17161	surface	1000	69	180	240	8.4	0.40	0.22	0.023	0.99	0.25	0.030		49	7.6	2.9	34
17160	surface	360	37	53	170	4.0	0.18	0.12	0.0077	0.58	0.15	0.0088		27	7.1	2.3	24
17159	mineral	39	8.0	28	190	2.1	0.30	0.19	0.0039	0.90	0.20	0.0059		22	4.6	<2.0	7.6
17158	mineral	30	5.0	13	51	0.74	0.44	0.85	0.0019	1.6	1.3	0.0066		80	6.1	6.0	<3.0
17157	mineral	20	3.0	15	47	0.63	0.42	0.83	0.0018	1.6	1.2	0.0056		80	6.6	5.9	<3.0
17156	mineral	49	7.0	37	98	1.4	0.58	0.95	0.0065	1.5	1.3	0.011		72	8.6	6.3	<3.0
17155	mineral	59	5.0	42	99	1.4	0.80	0.86	0.0098	1.6	1.3	0.014		87	6.6	5.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Sibbald Point Provincial Park

Date: 81/05/21

Location Code: 3001125

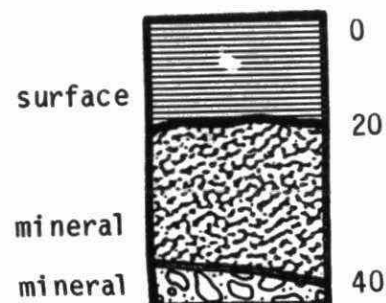
UTM: 17T 634250 4908950

Vegetation: sugar maple, white birch, beech, ironwood

Landform: sand plain/beach

Slope: level

Comments: large erratics at site, stones at 40 cm+



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17186	surface	0-20	10YR 2/2	69	13	17	6.2	5.5	1.0	1.4			<3.0		0.40
17185	mineral	20-40	10YR 4/4	70	11	18	6.9	6.1	2.0	0.90			<3.0		<0.080
17184	mineral	20-40	10YR 4/4	71	14	15	6.7	6.1	2.0	0.70			<3.0		<0.080
17183	mineral	40-50	10YR 4/4	66	16	18	7.1	6.4	2.0	0.60			<3.0		0.11
17182	mineral	40-50	10YR 4/4	72	11	17	7.3	6.5	2.0	0.50			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Sibbald Point Provincial Park

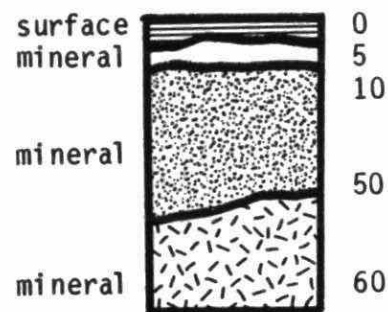
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
17186	surface	1600	60	54	<4.5	8.6	0.28	0.18	0.012	1.4	0.33	0.021	<1.0	65	8.6	10	8.2
17185	mineral	1300	33	20		6.8	0.24	0.18	0.0078	1.6	0.37	0.022	<1.0	48	7.1	9.0	3.5
17184	mineral	1400	36	20		7.3	0.24	0.18	0.0069	1.7	0.36	0.020	<1.0	54	7.1	9.5	6.8
17183	mineral	1500	40	22		7.9	0.28	0.22	0.011	1.7	0.31	0.030	<1.0	54	10	10	11
17182	mineral	1600	39	22		8.3	0.21	0.17	0.011	1.6	0.30	0.033	<1.0	60	10	11	6.9

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/06/02



Location Code: 3001128

UTM: 17T 662200 5006650

Vegetation: maple, birch, beech and oak

Landform: shallow till

Slope: level

Comments: biogeochemical site 1981

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17226	surface	0-5	7.5YR 2/0				4.4	3.9	8.0	6.8			17		21
17225	mineral	5-10	7.5YR 5/2	50	44	6.0	4.5	3.9	2.0	1.5			<3.0		11
17224	mineral	10-30	7.5YR 4/4	55	41	4.0	5.3	4.6	3.0	1.6			<3.0		4.2
17223	mineral	10-30	7.5YR 4/4	54	44	3.0	5.3	4.7	3.0	1.7			<3.0		3.5
17222	mineral	30-40	7.5YR 4/4	53	46	1.0	5.4	4.8	2.0	1.0			<3.0		1.6
17221	mineral	30-40	7.5YR 4/4	55	43	1.0	5.6	4.8	2.0	0.90			<3.0		1.7
17220	mineral	40-50	7.5YR 4/4	50	49	<1.0	5.3	4.8	2.0	0.90			<3.0		1.4
17219	mineral	40-50	7.5YR 4/4	63	37	<1.0	5.4	4.9	2.0	0.80			<3.0		1.2
17218	mineral	50-60	10YR 4/4	66	33	<1.0	5.4	4.8	1.0	0.60			<3.0		0.91
17217	mineral	50-60	10YR 4/4	64	33	3.0	5.5	4.8	2.0	0.60			<3.0		0.79

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
17226	surface	1600	180	280	62	11											
17225	mineral	300	45	49	170	3.7											
17224	mineral	180	17	12	56	1.5											
17223	mineral	210	22	7.0	46	1.8											
17222	mineral	150	12	<2.0	27	1.0											
17221	mineral	100	10	<2.0	25	0.83											
17220	mineral	46	7.0	12	21	<0.53											
17219	mineral	51	7.0	12	19	<0.53											
17218	mineral	51	7.0	16	11	<0.50											
17217	mineral	56	7.0	23	11	0.50											

SOIL PROFILE INFORMATION

Horizon Depth (cm)

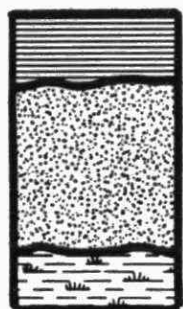
Site: Plastic Lake, #1, Dorset

Date: 81/06/03

surface

mineral

mineral



0

20

30

45

60

70

Location Code: 3001129

UTM: 17T 670950 5005250

Landform: shallow till

Slope: level

Vegetation: hemlock

Comments: faint, discontinuous bleached horizon. Mottle at 60-70 cm depth 10YR 5/6. Biogeochemical site 1981.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17236	surface	0-20	7.5YR 2/0				4.0	3.3	24	11			57		17
17235	surface	0-20	7.5YR 2/0				4.7	3.8	28	13			64		15
17234	mineral	20-30	7.5YR 3/4	49	44	7.0	4.7	4.2	4.0	2.0			<3.0		20
17233	mineral	20-30	7.5YR 3/4	57	36	7.0	4.9	4.3	5.0	2.8			<3.0		19
17232	mineral	30-45	7.5YR 3/4				5.1	4.5	5.0	3.1			<3.0		9.6
17231	mineral	30-45	7.5YR 3/4	55	40	5.0	5.0	4.5	5.0	3.3			<3.0		8.6
17230	mineral	45-60	10YR 3/4	45	50	5.0	5.0	4.5	3.0	2.3			<3.0		7.3
17229	mineral	45-60	10YR 3/4	43	53	4.0	5.0	4.5	3.0	1.8			<3.0		6.9
17228	mineral	60-70	10YR 6/1	49	50	1.0	5.4	4.9	1.0	0.50			<3.0		1.2
17227	mineral	60-70	10YR 6/1	36	63	2.0	5.5	4.9	1.0	0.70			<3.0		1.5

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, #1, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17236	surface	2600	180	280	140	17	0.16	0.18	0.0081	0.45	0.20	0.010		41	9.9	10	56
17235	surface	2700	230	450	38	17	0.23	0.19	0.11	0.57	0.28	0.14		54	13	10	50
17234	mineral	110	11	190	210	3.2	0.62	0.63	0.00080	1.8	1.1	0.0018		28	6.0	2.4	3.6
17233	mineral	130	22	54	210	3.0	0.86	0.89	0.00060	2.4	1.5	0.0023		28	6.0	3.4	4.8
17232	mineral	90	20	40	100	2.0	0.96	0.97	0.0028	2.6	1.7	0.0048		31	6.9	4.4	4.8
17231	mineral	66	15	35	78	1.5	0.91	1.0	0.0023	2.6	1.8	0.0039		34	9.4	5.1	3.7
17230	mineral	66	15	30	78	1.5	0.46	0.50	0.00090	1.5	1.1	0.0016		35	8.7	7.2	<3.0
17229	mineral	61	12	26	66	1.0	0.36	0.49	0.00040	1.2	0.95	0.0012		26	7.7	6.6	<3.0
17228	mineral	36	7.0	2.0	19	<0.50	0.071	0.18	0.00010	1.3	0.53	0.00010		19	12	6.6	<3.0
17227	mineral	22	5.0	2.0	17	<0.50	0.057	0.20	0.00010	1.2	0.54	0.00010		15	11	6.9	<3.0

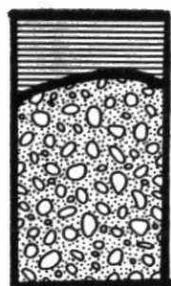
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Plastic Lake, #2, Dorset

Date: 81/06/03

surface



0

10

mineral

35

Location Code: 3001130

UTM: 17T 670950 5005250

Vegetation: hemlock

Landform: shallow till and rock ridges

Slope: gently sloping

Comments: biogeochemical site 1981
lysimeter pit

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17240	surface	0-10	7.5YR 2/0				4.7	3.7	22						5.7
17239	surface	0-10	7.5YR 2/0				4.7	3.9	9.0						4.8
17238	mineral	10-35	7.5YR 3/4				5.2	4.4	5.0						6.0
17237	mineral	10-35	7.5YR 3/4				5.2	4.3	5.0						6.0

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, #2, Dorset

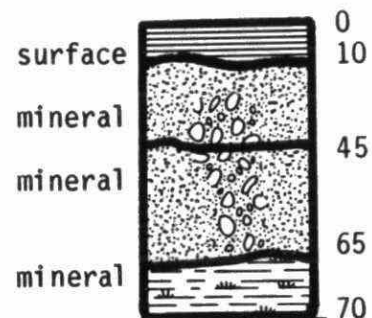
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17240	surface	1700	280	340	44	12											
17239	surface	2000	220	300	52	13											
17238	mineral	130	21	27	50	1.5											
17237	mineral	150	20	36	59	1.6											

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Plastic Lake, #3, Dorset

Date: 81/06/09



Location Code: 3001163

UTM: 17T 670950 5005250

Vegetation: maple

Landform: shallow till

Slope: level

Comments: mottle colour at the 65-70 cm,
(7.5YR 4/4) depth to bedrock 70 cm,
biogeochemical site 1981
lysimeter site

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17271	surface	0-10	7.5YR 2/0	37	35	49	4.6	4.1	10	10			12		33
17270	surface	0-10	7.5YR 2/0	33	46	22	5.4	4.4	9.0	8.8			17		29
17269	mineral	10-30	7.5YR 3/2	32	63	5.0	5.2	4.5	3.0	2.2			5.0		8.7
17268	mineral	10-30	7.5YR 3/2	27	63	9.0	5.2	4.5	3.0	2.7			7.0		6.9
17267	mineral	30-45	7.5YR 3/2	38	56	6.0	5.2	4.6	3.0	2.1			<3.0		5.6
17266	mineral	30-45	7.5YR 3/2	33	61	6.0	5.3	4.7	3.0	2.0			<3.0		5.0
17265	mineral	45-65	10YR 4/4	55	38	6.0	5.4	4.8	2.0	1.5			<3.0		4.7
17264	mineral	45-65	10YR 4/4	50	46	4.0	5.4	4.7	2.0	1.1			<3.0		3.4
17263	mineral	65-70	10YR 4/4	70	27	3.0	5.4	4.7	1.0	0.30			<3.0		1.6
17262	mineral	65-70	10YR 4/4	61	36	3.0	5.2	4.3	1.0	0.50			<3.0		1.6

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, #3, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17271	surface	1700	220	540	180	13	0.45	0.36	0.065	1.1	0.54	0.091		83	11	11	56
17270	surface	1000	140	300	140	8.2	0.34	0.27	0.076	1.1	0.51	0.13		70	7.7	11	51
17269	mineral	130	16	62	74	1.7	0.83	0.56	0.0089	1.9	0.90	0.021		92	9.2	13	7.6
17268	mineral	150	16	54	68	1.7	0.49	0.42	0.0065	1.8	0.97	0.019		97	11	16	7.0
17267	mineral	120	11	36	51	1.3	0.46	0.51	0.0026	1.6	1.0	0.0083		81	13	18	4.3
17266	mineral	120	16	41	47	1.3	0.48	0.54	0.0025	1.5	1.0	0.0074		76	12	17	5.2
17265	mineral	91	20	19	38	1.1	0.28	0.33	0.0012	1.3	0.86	0.0035		50	9.9	14	<3.0
17264	mineral	70	18	24	32	0.88	0.27	0.36	0.00040	1.2	0.83	0.0023		48	11	13	<3.0
17263	mineral	40	20	11	17	0.56	0.12	0.23	<0.00010	0.86	0.43	0.00020		27	11	10	<3.0
17262	mineral	20	9.0	11	15	<0.50	0.12	0.17	<0.00010	0.89	0.44	0.00050		28	13	13	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/06/24

surface

0

Location Code: 3001168

mineral

5

UTM: 17T 662200 5006650

Vegetation: birch

mineral

6

Landform: shallow till

30

Slope: level

Comments: biogeochemical site 1981
lysimeter site, bleached horizon
at 5-6 cm - organic contamination
when sampled

50

mineral

80

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17385	surface	0-5	10YR 2/1	60	22	18	4.3	4.0	9.0	12			23		11
17383	surface	0-5	10YR 2/1	62	21	17	4.5	4.0	5.0	3.1			4.0		7.3
17386	mineral	5-6	10YR 6/1	70	25	5.0	4.4	3.5	4.0	0.90			<3.0		5.9
17384	mineral	6-30	10YR 3/4	70	23	6.0	5.6	4.9	3.0	1.4			<3.0		0.70
17382	mineral	6-30	10YR 3/4	78	18	5.0	5.5	4.8	6.0	0.80			<3.0		1.5
17381	mineral	30-50	10YR 4/4	69	23	8.0	6.0	5.4	1.0	0.60			<3.0		0.20
17380	mineral	30-50	10YR 4/4	76	16	7.0	5.9	5.2	1.0	0.60			<3.0		0.33
17379	mineral	50-80	2.5Y 4/2	73	20	7.0	6.5	5.8	1.0	0.30			<3.0		0.18
17378	mineral	50-80	2.5Y 4/2	77	15	8.0	6.4	5.7	1.0	0.30			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

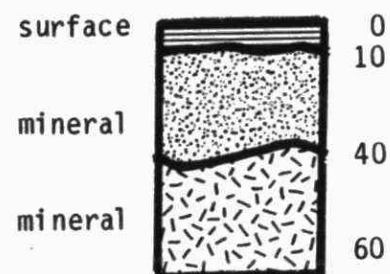
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17385	surface	3200	340	480	13	20											
17383	surface	1300	140	210	30	8.4											
17386	mineral	350	42	63	80	3.0											
17384	mineral	250	21	28	13	1.6											
17382	mineral	110	16	24	30	1.0											
17381	mineral	250	11	24	7.0	1.5							<1.0				
17380	mineral	180	11	24	4.0	1.1							<1.0				
17379	mineral	280	9.0	24		1.5							<1.0				
17378	mineral	200	7.0	24		1.1							<1.0				

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/06/24



Location Code: 3001170

UTM: 17T 662200 5006650

Vegetation: beech

Landform: shallow till and rock ridges

Slope: gentle slope

Comments: biogeochemical site
precipitation station 10

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17395	surface	0-10	10YR 2/1	72	17	11	3.8	3.2	12	13			68		18
17394	surface	0-10	10YR 2/1				3.8	3.2	20	11			46		20
17329	mineral	10-25	10YR 5/6	65	28	7.0	5.4	4.5	5.0	2.7			<3.0		8.3
17328	mineral	10-25	10YR 5/6	69	25	6.0	5.7	4.7	4.0	2.6			<3.0		4.1
17327	mineral	25-40	10YR 4/6	79	18	3.0	5.2	4.7	3.0	1.4			<3.0		4.5
17326	mineral	25-40	10YR 4/6	75	21	3.0	5.2	4.6	3.0	1.6			<3.0		4.8
17325	mineral	40-60		57	39	4.0	5.2	4.8	1.0	0.80			<3.0		2.6
17324	mineral	40-60		71	26	3.0	5.5	4.8	1.0	0.70			<3.0		2.3

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

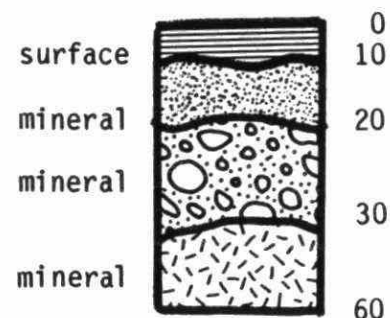
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17395	surface	1100	160	420	130	9.3	0.19	0.12	0.0083	0.56	0.13	0.010		52	9.6	8.7	75
17394	surface	1100	170	360	150	9.4	0.33	0.18	0.00070	0.83	0.21	0.0093		56	9.1	7.3	62
17329	mineral	150	11	36	70	1.6	0.89	0.76	0.0051	1.5	1.3	0.015		56	4.4	6.4	<3.0
17328	mineral	140	16	71	59	1.6	0.77	0.76	0.0047	1.4	1.2	0.013		60	3.0	6.3	<3.0
17327	mineral	70	5.0	11	39	0.80	0.22	0.44	0.0013	0.79	0.91	0.0042		49	5.4	9.3	<3.0
17326	mineral	50	7.0	11	45	0.78	0.24	0.37	0.0021	0.83	0.90	0.0063		52	5.9	9.7	<3.0
17325	mineral	60	5.0	6.0	20	0.55	0.11	0.22	0.00080	0.42	0.44	0.0039		28	5.9	9.2	<3.0
17324	mineral	30	5.0	15	26	<0.50	0.12	0.24	0.00080	0.42	0.46	0.0030		31	5.9	9.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Plastic Lake, Dorset

Date: 81/06/24



Location Code: 3001171

UTM: 17T 670950 5005250

Vegetation: white pine

Landform: shallow till

Slope: nearly level

Comments: faint, discontinuous bleached horizon, charcoal present in upper 10 cm biogeochemical site, lysimeter site

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17403	surface	0-10	10 YR 2/1				4.2	3.5	19	8.4			50		10
17402	surface	0-10	10 YR 2/1	44	30	27	4.0	3.2	13	12			47		25
17401	mineral	10-20	10 YR 6/6	54	37	9.0	4.8	4.5	4.0	2.4			<3.0		7.9
17400	mineral	10-20	10 YR 6/6	52	39	8.0	4.9	4.5	5.0	2.9			<3.0		7.2
17399	mineral	20-30	10 YR 4/6	50	41	9.0	4.8	4.4	5.0	3.4			<3.0		7.6
17398	mineral	20-30	10 YR 4/6	56	34	9.0	4.9	4.5	6.0	2.5			<3.0		8.2
17397	mineral	30-60	10 YR 5/8	71	22	7.0	4.8	4.5	4.0	1.8			<3.0		4.7
17396	mineral	30-60	10 YR 5/8	71	22	6.0	4.8	4.5	3.0	1.7			<3.0		4.8

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17403	surface	1400	400	620	130	13	0.30	0.14	0.027	0.91	0.20	0.032		57	14	10	85
17402	surface	1200	150	360	310	11	0.34	0.34	0.020	0.85	0.40	0.023		55	10	10	89
17401	mineral	20	11	71	88	1.2	0.54	1.1	0.0023	1.8	1.6	0.0061		44	7.6	5.9	3.1
17400	mineral	20	11	63	74	1.1	0.43	0.90	0.0024	1.6	1.6	0.0070		43	8.1	4.4	<3.0
17399	mineral	30	11	55	86	1.2	0.58	1.1	0.0016	1.4	1.6	0.0045		39	9.6	5.4	<3.0
17398	mineral	30	16	51	100	1.4	0.46	0.93	0.0013	1.3	1.6	0.0045		39	11	14	<3.0
17397	mineral	20	7.0	24	70	0.91	0.54	1.0	0.00030	1.2	1.4	0.0013		28	12	7.3	<3.0
17396	mineral	40	7.0	27	68	1.0	0.49	1.1	0.00040	1.2	1.6	0.00090		27	11	7.5	<3.0

SOIL PROFILE INFORMATION

Site: Balsam Lake Provincial Park

Date: 81/06/16

Location Code: 3001173

UTM: 17T 670250 4943350

Vegetation: grasses

Landform: esker

Slope: gentle slope

Comments: sample beside A.P.I.O.S.
precipitation collector

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18151	Surface	0-15		49	27	25	6.6	6.0	2.0	1.5			<3.0		0.096

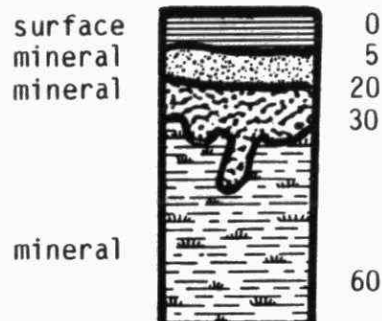
SOIL PROFILE INFORMATION (cont'd.)

Site: Balsam Lake Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18151	Surface	980	61	38		5.5	0.13	0.094	0.019	0.91	0.18	0.082	<1.0	65	9.0	6.2	6.3

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Balsam Lake Provincial Park Date: 81/06/16



Location Code: 3001174

UTM: 17T 670250 4943350

Landform: sand plain

Slope: very gentle slopes

Vegetation: maple, birch, pine

Comments: depth to faint mottling 30 cm,
strongly effervescent at depth
30-60 cm, weathered limestone
at 30-60 cm depth, near
A.P.I.O.S. collector

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18150	surface	0-5	5YR 3/1	59	21	19	7.1	6.6	3.0	2.6			10		0.11
18149	surface	0-5	5YR 3/1	55	24	22	6.5	6.0	2.0	3.1			4.0		<0.080
18148	mineral	5-20	10YR 3/2	64	19	18	6.8	6.3	2.0	1.7			<3.0		<0.080
18147	mineral	5-20	10YR 3/2	58	24	18	7.0	6.4	2.0	1.8			<3.0		0.10
18146	mineral	20-30	10YR 4/4	65	24	12	8.3	7.6	1.0	0.40			<3.0		0.088
18145	mineral	20-30	10YR 4/4	67	20	13	8.2	7.6	<0.50	0.40			<3.0		0.090
18144	mineral	30-60	2.5Y 5/2	67	23	11	8.5	7.8	1.0	0.20			<3.0		<0.080
18143	mineral	30-60	2.5Y 5/2	59	32	9.0	8.5	7.8	1.0	0.20			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd)

Site: Balsam Lake Provincial Park

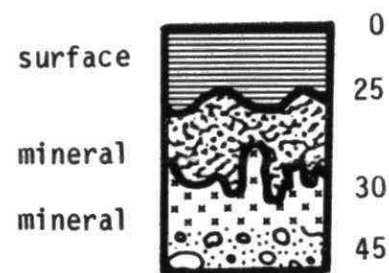
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18150	surface	2900	140	150		16	0.13	0.078	0.020	0.60	0.11	0.024	<1.0	44	6.9	3.5	9.6
18149	surface	2400	140	110		14	0.15	0.092	0.017	0.56	0.11	0.022	<1.0	40	6.4	2.6	9.6
18148	mineral	1600	110	40		9.2	0.21	0.16	0.028	0.99	0.18	0.047	<1.0	51	10	6.6	3.1
18147	mineral	1600	110	38		9.2	0.21	0.14	0.025	0.94	0.16	0.041	<1.0	50	10	5.7	6.1
18146	mineral	1100	41	23		5.9	0.060	0.041	0.0048	0.62	0.088	0.031	3.0	29	9.9	5.3	3.1
18145	mineral	870	50	25		4.8	0.064	0.043	0.0074	0.79	0.11	0.040	3.0	29	9.9	5.3	4.1
18144	mineral	1000	34	17		5.3	0.014	0.021	0.0029	0.36	0.044	0.023	15	23	11	4.8	<3.0
18143	mineral	820	41	23		4.5	0.011	0.017	0.0022	0.36	0.047	0.020	13	25	11	4.1	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Uxbridge

Date: 81/06/16



Location Code: 3001175

UTM: 17T 643000 4896800

Vegetation: grasses

Landform: sand plain/moraine

Comments: iron concretions at 30-45 cm depth, near A.P.I.O.S. precipitation collector

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18142	surface	0-25	10YR 3/2	83	6.0	11	7.9	7.4	2.0	1.9			<3.0		0.090
18141	surface	0-25	10YR 3/2	83	6.0	11	7.8	7.3	4.0	2.0			<3.0		<0.080
18140	mineral	25-30	7.5YR 5/8	86	6.0	9.0	8.1	7.5	1.0	0.70			<3.0		<0.080
18139	mineral	25-30	7.5YR 5/8	87	6.0	7.0	8.1	7.5	1.0	0.60			<3.0		<0.080
18138	mineral	30-45	10YR 5/4	90	4.0	6.0	8.5	7.6	<0.50	0.20			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Uxbridge

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18142	surface	2100	31	11		11	0.20	0.15	0.0096	0.86	0.17	0.018	3.0	36	6.4	<2.0	<3.0
18141	surface	2300	31	17		12	0.20	0.18	0.014	0.89	0.18	0.020	3.0	40	6.9	<2.0	8.5
18140	mineral	1100	16	11		5.6	0.20	0.14	0.0056	0.94	0.15	0.024	5.0	27	4.9	<2.0	<3.0
18139	mineral	930	16	6.0		4.8	0.17	0.12	0.0055	0.86	0.14	0.025	5.0	25	5.9	2.1	<3.0
18138	mineral	440	7.0	11		2.3	0.038	0.033	0.0022	0.44	0.038	0.0075	19	18	4.9	<2.0	<3.0

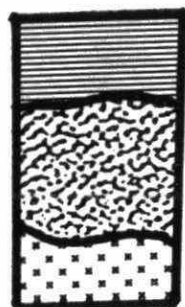
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Raven Lake

Date: 81/06/16

surface



0

25

mineral

mineral

45

60

Location Code: 3001176

Parent Material: sandy till

UTM: 17T 665850 4941750

Vegetation: maple, grasses

Landform: limestone plain

Comments: vicinity of A.P.I.O.S.
precipitation collector

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18157	surface	0-25	10YR 3/2	41	37	21	7.6	7.1	3.0	2.9			19		0.17
18156	surface	0-25	10YR 3/2	48	33	20	7.7	7.1	3.0	2.1			20		0.096
18155	mineral	25-45	10YR 4/4	51	34	16	7.7	7.1	1.0	0.50			<3.0		<0.080
18154	mineral	25-45	10YR 4/4	49	35	16	7.9	7.3	1.0	0.70			4.0		<0.080
18153	mineral	45-60	10YR 5/3	60	31	9.0	8.3	7.6	<0.50	0.30			<3.0		<0.080
18152	mineral	45-60	10YR 5/3	72	23	6.0	8.4	7.6	<0.50	0.30			<3.0		0.21

SOIL PROFILE INFORMATION (cont'd.)

Site: Raven Lake

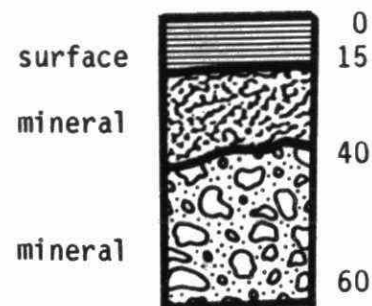
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb	
18157	surface	2800	45	130		15	0.13	0.075	0.018	0.78	0.12	0.033	2.0	52	6.8	4.3	9.7	
18156	surface	2300	47	130		12	0.13	0.074	0.019	0.76	0.11	0.034	1.0	48	6.7	4.7	3.8	
18155	mineral	1300	18	38		6.8	0.11	0.088	0.0048	0.65	0.12	0.028	2.0	31	6.7	6.1	<3.0	
18154	mineral	1600	18	38		8.2	0.12	0.099	0.0048	0.67	0.12	0.026	2.0	31	6.1	6.0	5.0	
18153	mineral	870	7.0	17		4.5	0.018	0.021	0.0014	0.26	0.035	0.014	28	10	6.1	<2.0	<3.0	
18152	mineral	760	7.0	19		3.9	0.018	0.020	0.0016	0.27	0.035	0.014	28	13	6.5	<2.0	6.3	

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Devil's Glen Provincial Park

Date: 81/06/23



Location Code: 1001186

UTM: 17T 563050 4912000

Vegetation: cedar, maple, pine, ferns

Landform: spillway

Comments: slightly stoney (shale)

Slope: gentle slopes

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18205	surface	0-15	10YR 3/3	27	48	25	6.1	5.5	3.0	2.5					0.55
18204	surface	0-15	10YR 3/3	16	56	25	6.0	5.4	3.0	2.6					0.51
18203	mineral	15-40	10YR 5/8	26	55	19	6.1	5.3	1.0	0.50					0.30
18202	mineral	15-40	10YR 5/8	30	54	16	6.0	5.2	1.0	0.50					0.26
18201	mineral	40-60	10YR 4/4	24	53	24	6.0	5.1	<0.50	0.40					0.19
18200	mineral	40-60	10YR 4/4	25	53	22	6.0	5.2	<0.50	0.30					0.18

SOIL PROFILE INFORMATION (cont'd.)

Site: Devil's Glen Provincial Park

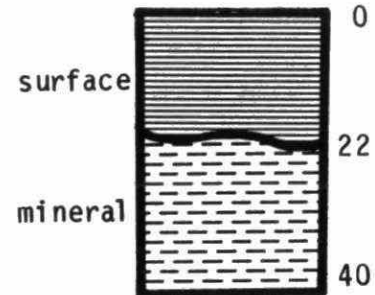
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18205	surface	1300	180	140		8.3	0.22	0.18	0.0083	0.89	0.25	0.013	<1.0	33	10	8.1	11
18204	surface	1500	180	130	<4.5	9.3	0.20	0.18	0.0072	0.94	0.26	0.013	<1.0	35	11	7.5	8.1
18203	mineral	470	53	56	<4.5	2.9	0.14	0.15	0.0018	1.0	0.31	0.0099	<1.0	24	11	8.9	<3.0
18202	mineral	480	58	53	<4.5	3.0	0.17	0.17	0.0034	0.93	0.24	0.018	<1.0	34	35	14	<3.0
18201	mineral	520	70	47	<4.5	3.3	0.11	0.095	0.0031	0.83	0.14	0.025	<1.0	28	17	10	<3.0
18200	mineral	550	82	43	<4.5	3.5	0.11	0.071	0.0027	0.92	0.14	0.026	<1.0	26	16	9.4	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Carruther's Memorial Conservation Area Date: 81/06/23

Location Code: 3001190



UTM: 17T 572450 4906900

Vegetation: maple, beech, cedar, grass

Landform: clay plain/lacustrine sediment

Comments: very compact horizons

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18189	surface	0-22	10YR 3/1	6.0	61	34	7.6	7.2	4.0	4.2			5.0		<0.080
18188	surface	0-22	10YR 3/1	5.0	72	24	7.6	7.2	3.0	4.2			<3.0		<0.080
18187	mineral	22-40	10YR 4/3	7.0	50	42	7.8	7.0	1.0	1.1			<3.0		<0.080
18186	mineral	22-40	10YR 4/3	8.0	46	47	7.7	7.0	1.0	1.1			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Carruther's Memorial Conservation Area

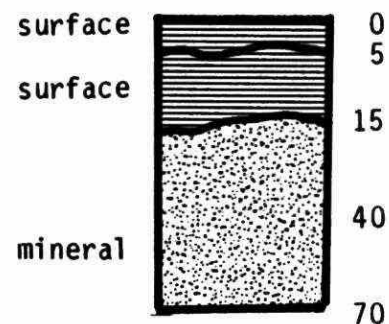
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18189	surface	3700	300	120		21	0.18	0.11	0.048	1.1	0.11	0.069	2.0	240	22	16	9.4
18188	surface	4400	270	96		24	0.18	0.083	0.031	1.1	0.11	0.068	2.0	230	23	16	9.4
18187	mineral	2200	200	60		13	0.16	0.080	0.0041	1.1	0.097	0.022	2.0	510	18	17	7.4
18186	mineral	2400	210	64		14	0.16	0.082	0.0038	1.0	0.10	0.021	2.0	550	18	17	5.3

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/07/06



Location Code: 3001192

UTM: 17T 662200 5006500

Vegetation: soft maple

Landform: shallow till and rock ridges

Comments: depth to gneiss bedrock 70 cm
biogeochemical site 1981, 0-5 cm
depth not sampled

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18215	surface	5-15	10YR 3/2	75	14	11	5.3	4.5	2.0	1.2					6.7
18214	surface	5-15	10YR 3/2	76	21	9.0	5.4	4.6	2.0	1.1					5.8
18213	mineral	15-40	10YR 5/6	77	18	5.0	5.5	4.6	2.0	0.60					4.9
18212	mineral	15-40	10YR 5/6	75	20	5.0	5.5	4.7	2.0	0.80					3.5
18211	mineral	40-70	10YR 5/6	70	21	9.0	5.3	4.6	1.0	0.50					4.2
18210	mineral	40-70	10YR 5/6	68	22	10	5.3	4.7	1.0	0.60					4.2

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18215	surface	110	9.0	24	53	1.2	0.23	0.36	0.0013	0.98	0.68	0.0028		34	6.7	7.6	<3.0
18214	surface	120	6.0	24	36	1.1	0.20	0.32	0.00080	0.96	0.66	0.0014		32	7.6	8.6	<3.0
18213	mineral	85	3.0	10	27	0.75	0.20	0.29	0.00050	0.95	0.64	0.0021		28	9.0	9.2	<3.0
18212	mineral	85	6.0	10	27	0.77	0.17	0.28	0.00050	0.93	0.65	0.0014		24	8.0	7.5	<3.0
18211	mineral	32	1.0	6.0	20	<0.50	0.19	0.26	0.00040	0.91	0.57	0.0005		27	8.8	8.3	<3.0
18210	mineral	21	1.0	5.0	24	<0.50	0.14	0.23	0.00040	0.89	0.58	0.0012		26	9.3	7.4	<3.0

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Blue Chalk Lake, Dorset	Date: 81/07/06
surface	0	Location Code: 3001193	
	10	UTM: 17T 662200 5006500	Vegetation: maple, yellow birch
	30	Landform: shallow till and rock ridges	Comments: depth to bedrock 50 cm. exceedingly stoney, vegetation site, biogeochemical site
mineral	55	Slope: nearly level	



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18218	surface	0-10	10YR 3/2	59	23	18	5.1	4.3	4.0	3.0					7.2
18217	mineral	10-30	5YR 4/3	63	25	12	5.1	4.3	3.0	1.3					11
18216	mineral	30-55	5YR 4/3	68	17	14	5.1	4.4	3.0	1.2					8.0

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

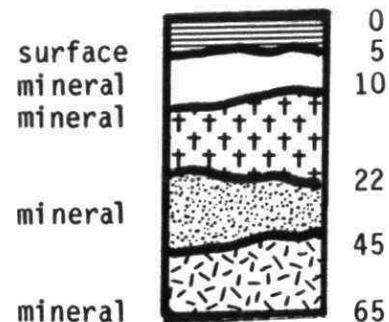
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18218	surface	900	92	120	88	6.4											
18217	mineral	120	5.0	24	66	1.4											
18216	mineral	74	3.0	15	58	1.0											

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/07/06



Location Code: 3001194

UTM: 17T 662200 5006500

Vegetation: soft maple

Landform: shallow till and rock ridges

Comments: slightly stoney, biogeochemical site, surface 0-5 cm not sampled

Slope: gentle slopes

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18225	mineral	5-10	2.5YR 5/4	52	30	17	4.3	3.6	3.0	1.8					24
18224	mineral	10-22	7.5YR 4/6	46	36	18	5.2	4.5	5.0	2.2					6.2
18223	mineral	10-22	7.5YR 4/6	51	31	19	5.1	4.4	5.0	2.4					9.3
18222	mineral	22-45	10YR 5/6	46	42	13	5.1	4.6	2.0	1.3					4.8
18221	mineral	22-45	10YR 5/6	53	38	9.0	5.1	4.4	2.0	1.1					5.3
18220	mineral	45-65	10YR 4/6	48	43	9.0	5.4	4.6	2.0	1.1					4.1
18219	mineral	45-65	10YR 4/6	60	31	9.0	5.2	4.5	2.0	0.80					6.1

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

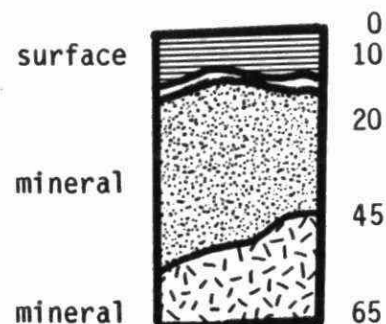
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18225	mineral	170	22	73	170	3.0	0.76	0.23	0.0021	1.3	0.36	0.0045		27	3.4	2.9	<3.0
18224	mineral	91	10	42	37	1.0	0.96	1.4	0.0013	2.2	1.7	0.0036		56	5.0	6.0	<3.0
18223	mineral	110	10	33	67	1.4	0.60	1.1	0.00080	1.5	1.4	0.0045		67	6.0	10	<3.0
18222	mineral	32	1.0	12	38	0.58	0.21	0.58	0.00050	1.2	1.2	0.0035		46	6.4	10	<3.0
18221	mineral	42	1.0	16	35	0.61	0.23	0.63	0.00030	1.1	1.2	0.0034		51	8.9	11	<3.0
18220	mineral	110	1.0	37	38	1.0	0.22	0.57	0.00060	0.87	0.83	0.0033		42	11	10	<3.0
18219	mineral	42	1.0	8.0	42	0.66	0.17	0.46	0.00030	0.73	0.78	0.0024		40	12	11	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/07/06



Location Code: 3001195

UTM: 17T 662200 5006500

Vegetation: hard maple

Landform: shallow till and rock ridges

Slope: nearly level

Comments: slightly stoney in 45-65 cm depth
faint bleached horizon (no sample)
biogeochemical site

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18233	surface	0-10	10YR 3/2	57	31	12	4.7	4.0	3.0	2.7					12
18232	surface	0-10	10YR 3/2	53	35	12	4.7	3.9	3.0	2.9					10
18231	mineral	10-20	10YR 3/4	71	24	5.0	5.2	4.4	3.0	2.0					7.7
18230	mineral	10-20	10YR 3/4	66	27	6.0	5.1	4.4	2.0	2.1					6.9
18229	mineral	20-45	10YR 4/4	78	19	3.0	5.2	4.6	2.0	1.0					3.5
18228	mineral	20-45	10YR 4/4	85	12	3.0	5.2	4.6	2.0	0.90					3.2
18227	mineral	45-65	10YR 5/4	67	27	6.0	5.3	4.7	1.0	0.60					2.3
18226	mineral	45-65	10YR 5/4	55	32	13	5.3	4.7	1.0	0.50					2.5

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

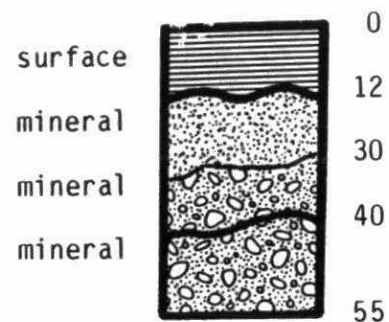
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18233	surface	370	29	77	140	3.7	0.62	0.19	0.0066	0.75	0.76	0.0045		31	2.4	2.7	9.6
18232	surface	440	34	87	130	4.0	0.40	0.15	0.0035	0.78		0.0055		23	2.1	2.1	5.0
18231	mineral	69	1.0	14	54	0.93	0.37	0.66	0.00050	1.0	1.0	0.0043		44	3.7	8.4	5.9
18230	mineral	85	3.0	18	56	1.1	0.71	0.85	0.0010	1.5	1.2	0.0038		49	4.1	6.1	<3.0
18229	mineral	32	1.0	6.0	27	<0.50	0.20	0.38	0.00060	0.71	0.70	0.0059		27	4.7	7.2	<3.0
18228	mineral	21	1.0	5.0	26	<0.50	0.20	0.32	0.00060	0.71	0.70	0.0055		27	5.2	8.2	<3.0
18227	mineral	21	1.0	5.0	20	<0.50	0.074	0.20	0.00020	0.43	0.39	0.0026		18	6.3	8.8	<3.0
18226	mineral	11	1.0	5.0	22	<0.50	0.083	0.31	0.00020	0.44	0.42	0.0021		18	6.4	8.4	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

Date: 81/07/06



Location Code: 3001196

UTM: 17T 662200 5006500

Vegetation: hard maple, red oak

Landform: shallow till and rock ridge

Comments: small stones in 0-30 cm depth
exceedingly stoney at 30 and 55
cm. biogeochemical site

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18240	surface	0-12	10YR 2/2	55	30	15	5.3	4.5	3.0	4.1					4.6
18239	surface	0-12	10YR 2/2	58	27	14	5.3	4.6	4.0	3.8					4.4
18238	mineral	12-30	7.5YR 3/4	59	33	8.0	5.3	4.6	4.0	2.2					4.4
18237	mineral	12-30	7.5YR 3/4	63	30	8.0	5.4	4.5	4.0	2.3					5.0
18236	mineral	30-40	10YR 3/3	72	24	5.0	5.4	4.5	2.0	0.80					4.1
18235	mineral	30-40	10YR 3/3	73	23	4.0	5.4	4.6	2.0	1.1					4.0
18234	mineral	40-55	10YR 4/4	81	15	4.0	5.4	4.7	1.0	0.60					2.4

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18240	surface	960	72	53	40	5.9	0.51	0.24	0.0082	1.2	0.46	0.014		40	2.8	4.9	4.1
18239	surface	910	62	60	27	5.5	0.76	0.34	0.013	1.3	0.55	0.018		46	3.1	4.9	6.0
18238	mineral	300	13	22	51	2.2	0.60	0.76	0.0016	1.3	1.1	0.0059		51	3.8	8.0	<3.0
18237	mineral	240	10	14	58	1.9	0.72	0.88	0.0013	1.3	1.1	0.0062		51	4.2	9.4	<3.0
18236	mineral	53	1.0	6.0	31	0.60	0.14	0.31	<0.00010	0.59	0.66	0.0028		29	4.9	9.7	<3.0
18235	mineral	53	1.0	6.0	38	0.67	0.21	0.37	<0.00020	0.76	0.75	0.0038		40	5.6	12	<3.0
18234	mineral	21	1.0	6.0	22	<0.50	0.12	0.23	<0.00010	1.2	0.30	0.010		28	7.2	15	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Blue Chalk Lake, Dorset

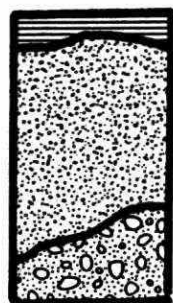
Date: 81/07/06

surface

mineral

mineral

mineral



Location Code: 3001197

UTM: 17T 662200 5006500

Landform: shallow till rock ridges

Slope: gentle slope

Vegetation: red oak, beech, maple

Comments: faint, discontinuous bleached horizon, biogeochemical site, surface 0-5 cm not sampled

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18246	mineral	5-30	7.5YR 3/4	68	26	6.0	5.2	4.4	3.0	1.8					9.4
18245	mineral	5-30	7.5YR 3/4	69	26	5.0	5.1	4.5	3.0	2.0					5.8
18244	mineral	30-40	10YR 4/4	72	21	6.0	5.1	4.5	2.0	1.0					4.0
18243	mineral	30-40	10YR 4/4	76	21	3.0	5.1	4.6	2.0	1.0					3.8
18242	mineral	40-55	10YR 4/6	70	22	8.0	5.2	4.6	1.0	0.80					3.1
18241	mineral	40-55	10YR 4/6	73	22	5.0	5.3	4.6	1.0	0.70					3.2

SOIL PROFILE INFORMATION (cont'd.)

Site: Blue Chalk Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18246	mineral	32	3.0	30	60	0.86	0.44	0.63	0.0016	1.6	1.2	0.0057		57	3.1	4.9	<3.0
18245	mineral	32	3.0	26	47	0.72	0.42	0.60	0.0010	1.6	1.2	0.0040		63	5.1	7.4	<3.0
18244	mineral	21	1.0	14	31	<0.50	0.21	0.33	0.00030	0.88	0.77	0.0024		39	5.1	7.0	<3.0
18243	mineral	21	1.0	10	27	<0.50	0.14	0.32	<0.00010	0.73	0.72	0.0021		34	5.3	8.1	<3.0
18242	mineral	21	1.0	10	27	<0.50	0.11	0.27	<0.00010	0.61	0.55	0.00090		26	7.2	9.0	<3.0
18241	mineral	21	1.0	14	27	<0.50	0.11	0.27	<0.00010	0.60	0.54	0.0020		27	7.1	7.8	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

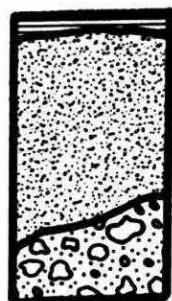
Site: Plastic Lake, Dorset

Date: 81/07/06

surface

mineral

mineral



0

5

15

30

45

Location Code: 3001198

UTM: 17T 670950 5005250

Landform: shallow till and rock ridges

Slope: moderate slopes

Vegetation: white pine, red oak, maple

Comments: very stoney, surface not sampled,
depth to faint mottling 40 cm.
biogeochemical site 1981

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18251	mineral	5-15	10YR 3/4	35	53	12	4.9	4.3	2.0	2.8					16
18250	mineral	5-15	10YR 3/4	41	51	9.0	5.0	4.4	3.0	2.4					9.6
18249	mineral	15-30	10YR 3/4	39	53	9.0	5.0	4.4	3.0	2.3					8.9
18248	mineral	15-30	10YR 3/4	40	52	8.0	5.0	4.4	4.0	2.5					9.6
18247	mineral	30-45	10YR 2/2	37	54	9.0	5.1	4.4	3.0	2.6					9.3

SOIL PROFILE INFORMATION (cont'd.)

Site: Plastic Lake, Dorset

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18251	mineral	74	6.0	39	100	1.5	1.5	0.71	0.0053	2.7	1.2	0.0095		57	6.6	5.5	<3.0
18250	mineral	53	6.0	51	63	1.1	1.0	0.54	0.0033	2.6	1.0	0.010		54	7.2	5.6	<3.0
18249	mineral	74	6.0	32	60	1.1	1.5	0.68	0.0013	2.8	1.2	0.0050		59	7.0	6.6	<3.0
18248	mineral	85	6.0	35	63	1.2	1.9	0.85	0.0016	2.8	1.2	0.0057		63	9.1	6.2	6.1
18247	mineral	120	6.0	30	67	1.4	0.79	0.66	0.00020	1.5	0.98	0.0014		48	9.6	6.8	<3.0

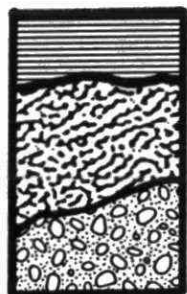
SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Kawartha Conservation Area

Date: 81/07/23

surface



0

10

mineral

35

mineral

47

Location Code: 3001211

UTM: 17T 677350 4919200

Landform: till plain

Slope: level

Vegetation: white pine, cedars, ferns, grasses

Comments: limestone rock fragments and gravel in 35-47 cm. depth.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18296	surface	0-10	7.5YR 3/2	24	44	32	7.5	7.1	3.0	2.1			24		<0.080
18295	surface	0-10	7.5YR 3/2	29	39	32	7.7	7.3	4.0	2.0			24		<0.080
18294	mineral	10-35	5YR 3/4	17	51	32	7.7	7.2	2.0	1.2			15		<0.080
18293	mineral	10-35	5YR 3/4	17	52	31	7.6	7.1	2.0	1.5			12		0.280
18292	mineral	35-47	10YR 6/4	49	41	10	8.1	7.4	1.0	0.90			5.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Kawartha Conservation Area

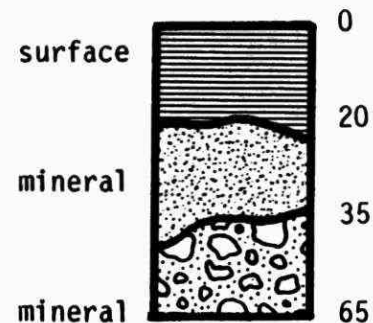
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18296	surface	3100	83	97		16	0.096	0.052	0.023	1.0	0.13	0.056	13	51	6.5	8.5	14
18295	surface	2700	76	92		14	0.086	0.052	0.022	1.2	0.13	0.054	15	54	7.5	8.5	12
18294	mineral	2100	91	58		12	0.13	0.066	0.014	1.5	0.22	0.059	1.5	58	7.6	12	9.7
18293	mineral	2200	87	52		12	0.15	0.083	0.020	1.4	0.21	0.060	1.0	58	6.6	9.7	9.3
18292	mineral	1100	52	30		6.0	0.059	0.058	0.0038	0.61	0.086	0.025	31	22	7.5	7.6	4.7

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: The Gut Conservation Area

Date: 81/08/17



Location Code: 3001218

UTM: 18T 276750 4961550

Vegetation: birch, fern, grasses

Landform: moraine

Comments: very stoney at 35-65 cm. depth

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18383	surface	0-20	7.5YR 4/4	63	30	7.0	5.3	4.5	3.0	2.6			12		3.9
18382	surface	0-20	7.5YR 4/4	59	39	2.0	5.5	4.6	3.0	2.0			10		3.2
18381	mineral	20-35	7.5YR 5/6	73	21	6.0	5.9	5.1	2.0	1.3			8.0		0.50
18380	mineral	20-35	7.5YR 5/6	71	27	2.0	6.0	5.2	2.0	1.1			6.0		0.44
18379	mineral	35-65	10YR 6/6	69	26	5.0	6.2	5.4	1.0	0.40			12		0.27
18378	mineral	35-65	10YR 6/6	71	27	2.0	6.1	5.3	1.0	0.40			11		0.16

SOIL PROFILE INFORMATION (cont'd.)

Site: The Gut Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18383	surface	400	41	79	28	2.8	0.32	0.24	0.0075	0.87	0.41	0.014		50	4.8	4.5	11
18382	surface	400	31	67	23	2.7	0.31	0.24	0.0079	0.90	0.42	0.016		42	4.4	4.4	5.2
18381	mineral	490	15	19	5.0	2.7	0.58	0.55	0.00090	1.2	0.70	0.0039	<1.0	37	5.4	5.8	<3.0
18380	mineral	530	21	29	4.0	2.9	0.32	0.27	0.0006	0.98	0.61	0.0047	<1.0	43	6.0	5.8	<3.0
18379	mineral	230	6.0	17	<4.5	1.3	0.086	0.19	0.00010	0.50	0.39	0.0031	<1.0	40	8.6	8.2	<3.0
18378	mineral	200	8.0	15	<4.5	1.1	0.092	0.21	0.00020	0.54	0.42	0.0031	<1.0	41	8.1	9.2	<3.0

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Ganaraska Forest, Port Hope

Date: 81/07/27

surface
mineral

mineral

mineral
mineral



0
15
20
35
50
70
80

Location Code: 3001230

UTM: 17T 711950 4884650

Landform: sand plain

Slope: nearly level

Vegetation: oak, maple, pine ferns

Comments: some stones at 50+ cm,
road cut, old Lake Iroquois
shoreline

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18306	surface	0-15	10YR 3/3	59	19	21	6.3	5.7	2.0	1.3			11		0.66
18305	surface	0-15	10YR 3/3	71	13	16	6.0	5.4	2.0	1.2			14		0.96
18307	mineral	15-20	10YR 5/6	69	16	15	5.9	5.2	1.0	0.60			24		0.89
18304	mineral	20-35	10YR 6/6	73	17	10	6.1	5.3	1.0	0.30			17		0.46
18303	mineral	20-35	10YR 6/6	80	12	9.0	6.2	5.4	<0.50	0.30			9.0		0.30
18302	mineral	35-50	10YR 6/6	80	11	9.0	6.4	5.6	<0.50	<0.10			9.0		0.098
18301	mineral	35-50	10YR 6/6	79	7.0	14	6.5	5.6	<0.50	<0.10			9.0		<0.080
18300	mineral	50-70	10YR 5/8	81	8.0	12	7.1	6.4	<0.50	0.20			5.0		<0.080
18299	mineral	50-70	10YR 5/8	81	7.0	11	8.0	7.3	<0.50	0.20			7.0		<0.080
18298	mineral	70-80	10YR 6/4	85	6.0	9.0	8.4	7.6	<0.50	<0.10			<3.0		<0.080
18297	mineral	70-80	10YR 6/4	85	7.0	8.0	8.5	7.6	<0.50	0.20			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Ganaraska Forest, Port Hope

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18306	surface	900	58	26		5.0	0.16	0.16	0.038	0.62	0.18	0.072	<1.0	30	1.7	4.9	6.5
18305	surface	750	53	30	<4.5	4.3	0.19	0.16	0.038	0.62	0.19	0.076	<1.0	26	1.7	4.4	3.9
18307	mineral	680	34	13	<4.5	3.8	0.16	0.17	0.0063	0.74	0.26	0.014	<1.0	22	1.7	3.9	3.2
18304	mineral	330	22	6.0	<4.5	1.9	0.095	0.11	0.0028	0.54	0.18	0.0093	<1.0	18	2.7	4.9	<3.0
18303	mineral	230	17	4.0	<4.5	1.3	0.055	0.082	0.0011	0.45	0.14	0.0021	<1.0	16	2.2	4.9	<3.0
18302	mineral	350	27	10		2.0	0.047	0.040	0.0019	0.42	0.071	0.011	<1.0	12	1.7	4.4	3.9
18301	mineral	260	20	7.0		1.5	0.042	0.043	0.0019	0.37	0.074	0.0089	<1.0	10	1.7	4.4	<3.0
18300	mineral	770	29	14		4.1	0.044	0.036	0.0019	0.52	0.092	0.017	<1.0	15	4.2	5.8	<3.0
18299	mineral	650	10	12		3.4	0.018	0.018	0.0018	0.36	0.047	0.016	11	14	4.3	4.2	<3.0
18298	mineral	460	3.0	10		2.4	0.010	0.011	0.0016	0.27	0.032	0.010	21	11	3.8	3.2	<3.0
18297	mineral	520	1.0	8.0		2.6	0.011	0.014	0.0018	0.30	0.041	0.012	18	13	4.4	3.6	<3.0

SOIL BASELINE ANALYTICAL DATA, 1980-1981

SOUTHEASTERN REGION

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

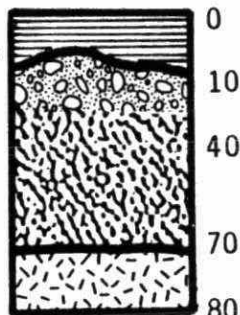
Site: Bon Echo Provincial Park

Date: 80/06/16

surface

mineral

mineral



Location Code: 4001027

UTM: 18T 326950 4973750

Vegetation: pine, oak, maple

Landform: shallow till and rock outcrop

Comments: many stones at 30 cm

Slope: gentle slope

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9209	surface	0-10	5YR 2.5/2	76	16	9.0	5.2	4.5	2.8	0.89	8.9			270	
9210	surface	0-10	5YR 2.5/2	75	16	9.0	5.2	4.2	2.3	1.1	8.4			310	
9207	mineral	10-40	7.5YR 4/4	75	19	7.0	5.8	4.6	0.80	0.63	7.4			350	
9208	mineral	10-40	7.5YR 4/4	72	22	6.0	5.5	4.6	0.80	0.61	6.6			300	
9205	mineral	40-70	7.5YR 4/4	91	4.0	5.0	5.6	4.6	0.31	0.22	5.1			470	
9206	mineral	40-70	7.5YR 4/4	89	7.0	4.0	5.5	4.9	0.16	0.24	3.6			260	
9203	mineral	70-80	2.5Y 5/6				5.9	4.9	0.090	0.20	3.9			290	
9204	mineral	70-80	2.5Y 5/6	98	1.0	1.0	5.7	4.9	0.13	<0.13	4.4			220	

SOIL PROFILE INFORMATION (cont'd.)

Site: Bon Echo Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9209	surface	410	53	75	59	3.3	0.18	0.14	0.0093	0.78	0.22	0.024		69	16	7.9	14
9210	surface	330	44	85	83	3.0	0.26	0.15	0.0077	0.81	0.19	0.022		59	13	6.8	14
9207	mineral	130	12	32	13	0.94	0.13	0.20	0.0017	0.92	0.36	0.010		71	14	12	<3.0
9208	mineral	67	12	68	17	0.77	0.080	0.17	0.0017	0.77	0.33	0.0060		63	20	12	<3.0
9205	mineral	48	5.0	17	8.0	0.40	0.050	0.080	0.0013	0.48	0.21	0.0060		42	26	9.3	<3.0
9206	mineral	33	5.0	22	13	0.40	0.040	0.080	0.00070	0.32	0.14	0.0030		26	16	7.1	<3.0
9203	mineral	48	5.0	17	<2.3	0.34	0.070	0.040	0.0019	0.31	0.11	0.0060		24	18	6.8	<3.0
9204	mineral	38	5.0	17	<2.3	0.28	0.030	0.050	0.0019	0.27	0.080	0.0060		24	30	5.9	<3.0

SOIL PROFILE INFORMATION

Horizon

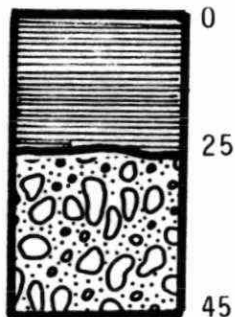
Depth (cm)

Site: Gould Lake Conservation Area

Date: 80/06/17

surface

mineral



Location Code: 4001028

UTM: 18T 373450 1923050

Landform: limestone plain

Slope: level

Vegetation: grass

Comments: bedrock at 45 cm
limestone fragments throughout
pit

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9213	surface	0-25	5YR 3/2	41	34	26	6.9	6.7	4.9	4.4	13			1100	
9214	surface	0-25	5YR 3/2	41	29	30	7.1	6.6	4.1	3.3	8.8			1100	
9211	mineral	25-45	5YR 4/3	35	32	34	7.2	6.5	2.0	1.5	5.7			900	
9212	mineral	25-45	5YR 4/3	32	32	36	7.1	6.8	1.5	1.4	5.9			760	

SOIL PROFILE INFORMATION (cont'd.)

Site: Gould Lake Conservation Area

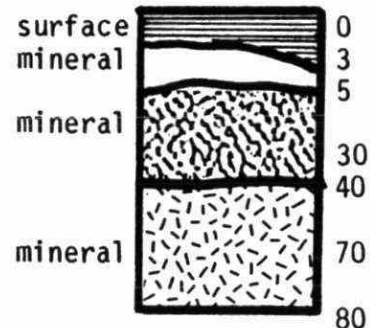
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9213	surface	3600	210	260		20	0.20	0.12	0.10	1.8	0.25	0.15	<1.0	100	28	22	34
9214	surface	3200	140	180		17	0.23	0.13	0.049	1.6	0.23	0.12	<1.0	86	27	20	20
9211	mineral	2000	120	120		11	0.24	0.12	0.030	2.1	0.27	0.16	<1.0	73	33	27	22
9212	mineral	2000	98	86		11	0.19	0.090	0.019	2.1	0.26	0.19	<1.0	73	37	31	20

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Gould Lake Conservation Area

Date: 80/06/17



Location Code: 4J01029

UTM: 18T 374000 4924400

Vegetation: oak, maple, pine, spruce

Landform: shallow till and rock ridge

Comments: bleached horizon at 3-5 cm
very thin and discontinuous

Slope: gently sloping

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9223	surface	0-3	7.5YR 2.5/0				4.7	4.1	16	4.2				740	
9224	surface	0-3	7.5YR 2.5/0				4.5	3.9	17	5.2	41			630	
9225	mineral	3-5	7.5YR 6/2	62	24	14	4.6	3.7	2.2	0.71	6.4			250	
9221	mineral	5-30	10YR 4/4	59	32	9.0	5.5	4.2	0.68	0.36	3.2			390	
9222	mineral	5-30	10YR 4/4	58	34	8.0	5.0	4.1	0.84	0.49	3.3			295	
9219	mineral	30-40	10YR 4/4	56	32	12	5.6	4.4	0.48	0.30	3.7			520	
9220	mineral	30-40	10YR 4/4	58	32	10	5.4	4.3	0.73	0.32	4.5			320	
9217	mineral	40-70	10YR 5/3	16	51	33	5.8	4.9	0.35	0.28	4.1			820	
9218	mineral	40-70	10YR 5/3	16	52	33	5.6	4.8	0.32	0.35	5.2			770	
9215	mineral	70-80	10YR 5/3	24	39	36	6.0	5.2	0.38	0.33	4.4			1000	
9216	mineral	70-80	10YR 5/3	24	41	35	5.8	5.0	0.52	0.36	5.1			940	

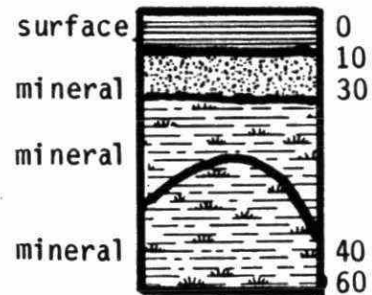
SOIL PROFILE INFORMATION (cont'd.)

Site: Gould Lake Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9223	surface	2600	560	200	43	18	0.20	0.12	0.012	0.91	0.13	0.029		66	31	17	41
9224	surface	2400	490	160	77	17	0.20	0.13	0.0060	0.89	0.14	0.019		65	27	16	42
9225	mineral	240	41	42	390	5.5	0.25	0.12	0.0018	0.88	0.13	0.013		45	22	9.7	6.5
9221	mineral	240	110	27	170	3.6	0.17	0.11	0.0017	1.0	0.20	0.0080		55	34	15	3.7
9222	mineral	78	56	27	180	2.7	0.15	0.12	0.00090	0.95	0.21	0.0060		44	24	12	3.1
9219	mineral	180	86	37	80	2.5	0.13	0.12	0.0011	0.92	0.25	0.0070		45	38	18	4.2
9220	mineral	160	110	37	110	2.8	0.13	0.12	0.0010	0.91	0.22	0.0060		50	27	15	<3.0
9217	mineral	2400	390	37	15	16	0.11	0.060	0.0017	1.3	0.11	0.054		63	49	30	8.0
9218	mineral	1300	380	42	22	9.8	0.11	0.070	0.0016	1.3	0.070	0.060		59	33	29	8.2
9215	mineral	2400	500	53	4.0	16	0.090	0.050	0.0015	1.1	0.12	0.040	<1.0	64	43	30	5.7
9216	mineral	2300	500	53	9.0	16	0.090	0.050	0.0015	1.2	0.19	0.044	<1.0	64	44	30	5.2

SOIL PROFILE INFORMATION

Horizon Depth (cm)



Site: Little Cataraqui Creek
Conservation Area

Location Code: 4001030

UTM: 18T 379450 4903700

Landform: clay plain

Slope: level

Date: 80/06/17

Vegetation: grass, some assorted shrubs

Comments: many medium mottles - (10YR 5/6)
at 30 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9232	surface	0-10	10YR 3/2	15	41	44	5.8	5.2	6.0	3.4	18			640	
9233	surface	0-10	10YR 3/2	14	43	43	5.9	5.2	5.1	3.5	19			680	
9230	mineral	10-30	10YR 4/2	15	43	42	5.7	5.0	2.8	1.9	10			570	
9231	mineral	10-30	10YR 4/2	17	34	49	5.7	5.0	3.3	2.0	8.9			550	
9228	mineral	30-40	10YR 5/1	18	35	47	6.3	5.6	0.70	0.65	6.1			390	
9229	mineral	30-40	10YR 5/1	14	37	49	6.3	5.6	0.89	0.90	6.2			510	
9226	mineral	40-60	10YR 5/1	7.0	18	75	6.7	6.4	0.21	0.32	17			600	
9227	mineral	40-60	10YR 5/1	8.0	19	73	7.0	6.6	0.25	0.29	15			590	

SOIL PROFILE INFORMATION (cont'd.)

Site: Little Cataraqui Creek Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9232	surface	2000	570	220	<4.5	15	0.27	0.13	0.0099	1.4	0.14	0.035	<1.0	110	35	24	30
9233	surface	2000	440	190	<4.5	14	0.26	0.14	0.0085	1.4	0.14	0.035	<1.0	110	39	24	28
9230	mineral	4400	450	100	9.0	26	0.29	0.14	0.0062	1.4	0.15	0.034		96	29	23	15
9231	mineral	4100	440	110	9.0	24	0.28	0.14	0.0058	1.5	0.15	0.037		97	38	23	16
9228	mineral	1600	660	64		13	0.13	0.050	0.0035	1.7	0.090	0.053	<1.0	91	32	27	9.1
9229	mineral	1600	730	69		14	0.13	0.060	0.0036	1.5	0.080	0.048	<1.0	94	28	26	7.2
9226	mineral	3500	1800	140		32	0.030	0.020	0.0038	1.2	0.080	0.064	<1.0	120	64	52	8.9
9227	mineral	3400	1800	120		32	0.030	0.020	0.0041	1.2	0.080	0.059		120	64	50	8.1

SOIL PROFILE INFORMATION

Horizon	Depth (cm)
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Site: Grave's Farm (near Kingston)

Date: 80/06/18

surface  0
15

Location Code: 4001031

mineral

UTM: 18T 392850 4903750

Vegetation: grass, maple, birch




40
50

Landform: beach

Comments: iron nodules at 100 cm.

80

Slope: gentle slope

mineral  100

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9242	surface	0-15	10YR 5/3	86	10	4.0	5.9	4.8	1.3	0.76	6.7			700	
9243	surface	0-15	10YR 5/3	86	9.0	5.0	5.9	4.8	1.3	0.74	6.8			890	
9240	mineral	15-40	10YR 6/6	92	4.0	3.0	6.3	5.2	0.25	0.23	6.1			660	
9241	mineral	15-40	10YR 6/6				6.3	5.2	0.37	0.31	5.9			540	
9238	mineral	40-50	10YR 5/6	98	1.0	1.0	6.4	5.4	0.04	<0.13	3.1			530	
9239	mineral	40-50	10YR 5/6	98	1.0	<1.0	6.3	5.3	0.21	<0.14	3.6			580	
9236	mineral	50-80	10YR 5/6	99	2.0	<1.0	6.4	5.3	0.070	0.17	3.3			940	
9237	mineral	50-80	10YR 5/6	99	2.0	<1.0	6.3	5.4	0.090	<0.14	3.4			610	
9234	mineral	80-100	10YR 5/4	88	4.0	8.0	6.7	5.6	0.23	<0.12	2.6			730	
9235	mineral	80-100	10YR 5/4	87	8.0	5.0	6.4	5.4	0.23	<0.15	5.1			820	

SOIL PROFILE INFORMATION (cont'd.)

Site: Grave's Farm (near Kingston)

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9242	surface	260	53	75	17	2.1	0.14	0.15	0.0083	0.75	0.15	0.031		45	26	7.2	3.9
9243	surface	190	27	18	6.0	1.3	0.17	0.17	0.0099	0.76	0.18	0.028		36	20	5.7	3.6
9240	mineral	140	22	53	3.3	1.0	0.10	0.13	0.00080	0.74	0.13	0.0050	<1.0	30	21	7.6	<3.0
9241	mineral	140	32	47	3.3	1.1	0.13	0.16	0.00090	0.79	0.16	0.0060	<1.0	31	18	7.4	<3.0
9238	mineral	79	10	53	<2.3	0.62	0.040	0.070	0.0013	0.30	0.080	0.0040	<1.0	14	19	5.5	<3.0
9239	mineral	79	12	39	<2.3	0.60	0.050	0.080	0.0013	0.55	0.090	0.0060	<1.0	17	23	6.5	<3.0
9236	mineral	79	10	47	<2.3	0.63	0.030	0.050	0.0011	0.43	0.060	0.0070	<1.0	15	16	6.9	<3.0
9237	mineral	79	10	42	<2.3	0.60	0.020	0.050	0.0011	0.39	0.060	0.0070	<1.0	12	19	5.8	<3.0
9234	mineral	190	35	73		1.3	0.020	0.020	0.0010	0.49	0.040	0.012	<1.0	17	14	5.7	<3.0
9235	mineral	220	41	110	<2.3	1.7	0.030	0.030	0.00090	0.50	0.050	0.012	<1.0	17	17	8.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Charleston Lake Provincial Park

Date: 80/07/21

surface 0

Location Code: 4001063

mineral 20

UTM: 18T 418100 4928650

Vegetation: maple, junipers

Landform: clay plain

Comments: faint mottling at 35 cm
very stoney (granitic)

mineral 35
45

Slope: simple, class 1, level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9501	surface	0-20	10YR 3/1	49	33	18	6.0	5.2	2.8	1.8	9.8			400	
9502	surface	0-20	10YR 3/1	55	28	17	5.9	5.2	3.0	1.9	11			490	
9499	mineral	20-35	10YR 4/3	49	32	19	6.3	5.3	0.69	0.61	4.0			370	
9500	mineral	20-35	10YR 4/3	48	35	17	6.2	5.2	0.69	0.63	3.5			280	
9497	mineral	35-45	10YR 5/2	16	36	48	6.2	5.5	0.61	0.45	5.9			580	
9498	mineral	35-45	10YR 5/2	28	35	37	6.2	5.4	0.59	0.45	4.3			490	

SOIL PROFILE INFORMATION (cont'd.)

Site: Charleston Lake Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9501	surface	1300	260	92	<4.5	8.6	0.18	0.090	0.022	0.64	0.14	0.042	<1.0	130	26	11	13
9502	surface	1300	260	92	<4.5	8.6	0.19	0.10	0.022	0.60	0.13	0.039	<1.0	110	13	9.6	14
9499	mineral	660	150	26	4.2	4.6	0.19	0.11	0.012	0.67	0.15	0.042	<1.0	150	26	14	5.1
9500	mineral	720	150	26	4.0	4.9	0.18	0.11	0.012	0.70	0.15	0.043	<1.0	140	27	14	4.9
9497	mineral	1800	580	38		13	0.080	0.040	0.0053	1.2	0.18	0.060	<1.0	124	47	33	8.4
9498	mineral	1400	440	49	3.2	11	0.070	0.040	0.0047	1.0	0.17	0.056	<1.0	140	47	29	7.4

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Foley Mountain Conservation Area

Date: 80/07/21

Location Code: 4001064

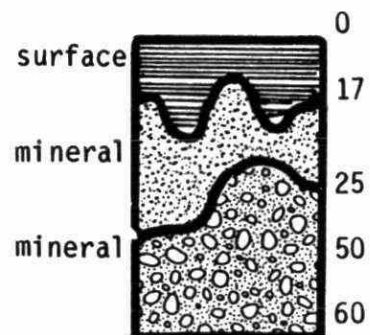
UTM: 18T 389550 4948700

Vegetation: pine, spruce, grasses

Landform: shallow till and rock outcrops

Comments: very stoney 30-60 cm
depth to bedrock 60 cm

Slope: simple, class 1, level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9509	surface	0-17	10YR 3/2	78	12	10	5.4	4.4	3.4	1.3	9.9			980	
9510	surface	0-17	10YR 3/2	77	15	8.0	5.4	4.4	2.4	1.7	7.8			1400	
9507	mineral	17-25	5YR 4/6	84	11	4.0	5.6	4.7	0.72	0.61	8.2			1500	
9508	mineral	17-25	5YR 4/6	82	13	5.0	5.5	4.7	0.76	0.62	7.7			1400	
9505	mineral	25-50	5YR 5/6	89	7.0	3.0	5.7	4.7	0.60	0.43	8.3			1600	
9506	mineral	25-50	5YR 5/6	84	11	5.0	5.6	4.7	0.76	0.20	8.6			580	
9503	mineral	50-60	5YR 5/6	92	6.0	2.0	5.5	4.6	0.63	0.17	9.2			510	
9504	mineral	50-60	5YR 5/6	84	13	3.0	5.6	4.6	0.65	0.41	7.1			1500	

SOIL PROFILE INFORMATION (cont'd.)

Site: Foley Mountain, Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9509	surface	300	43	49	50	2.5	0.29	0.27	0.066	1.6	0.42	0.24		77	9.1	12	16
9510	surface	210	34	39	48	1.9	0.20	0.18	0.051	1.4	0.37	0.17		67	6.6	54	11
9507	mineral	53	12	20	17	0.58	0.18	0.22	0.0025	1.4	0.43	0.018		49	23	23	<3.0
9508	mineral	53	12	15	19	0.58	0.17	0.24	0.0041	1.3	0.42	0.023		46	20	18	3.1
9505	mineral	74	12	15	17	0.68	0.25	0.25	0.0043	1.3	0.36	0.022		47	20	31	3.1
9506	mineral	85	12	15	21	0.77	0.19	0.21	0.0036	1.3	0.38	0.024		43	19	25	3.5
9503	mineral	96	12	15	83	1.4	0.26	0.20	0.0039	1.3	0.34	0.017		30	23	29	<3.0
9504	mineral	74	12	10	27	0.76	0.25	0.20	0.0066	1.4	0.37	0.029		36	28	34	3.1

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Perth Wildlife Reserve

Date: 80/07/21

Location Code: 4001065

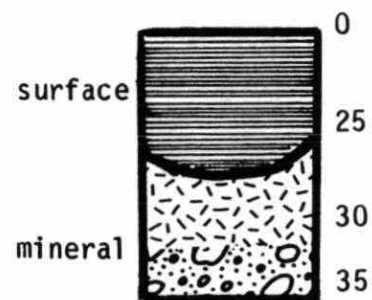
UTM: 18T 407100 4972150

Vegetation: grasses

Landform: shallow till and rock ridge

Comments: depth to granite bedrock 35 cm
stoney at 30 cm

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9513	surface	0-25	10YR 3/2	42	35	23	6.6	6.0	2.9	2.0	9.8			780	
9514	surface	0-25	10YR 3/2	50	28	22	6.8	6.1	2.5	2.1	11			870	
9511	mineral	25-35	10YR 4/3	43	32	25	6.9	6.3	0.72	0.53	6.0			890	
9512	mineral	25-35	10YR 4/3	50	23	27	7.0	6.3	0.65	0.70	4.0			910	

SOIL PROFILE INFORMATION (cont'd.)

Site: Perth Wildlife Reserve

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9513	surface	1900	170	45		11	0.15	0.10	0.030	1.2	0.18	0.089	<1.0	58	13	13	7.4
9514	surface	1900	170	50		11	0.13	0.090	0.028	1.2	0.18	0.089	<1.0	50	11	11	5.4
9511	mineral	1300	140	32		7.7	0.090	0.030	0.0056	1.2	0.17	0.089	<1.0	35	12	16	3.7
9512	mineral	1300	140	32		7.7	0.070	0.030	0.0054	1.1	0.15	0.083	<1.0	32	13	16	3.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Rideau River Provincial Park

Date: 80/07/21

Location Code: 4001066

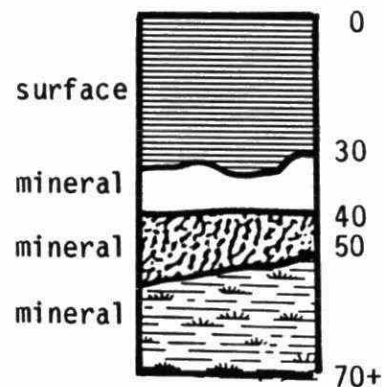
UTM: 18T 446550 4989100

Landform: sand plain/beach

Slope: level

Vegetation: pine, ferns, grass

Comments: abundant mottles below 50 cm (10YR 5/8), iron concretions in 40-50 cm depth, evidence of plowing, reforestation



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9523	surface	0-30	10YR 3/3	82	13	5.0	6.1	5.1	2.7	1.2	17			370	
9524	surface	0-30	10YR 3/3	82	11	7.0	6.1	5.2	2.6	1.3	18			430	
9521	mineral	30-40	5YR 6/1	85	8.0	7.0	6.8	5.8	0.57	0.29	5.4			110	
9522	mineral	30-40	5YR 6/1	83	11	6.0	6.4	5.4	1.0	0.42	8.0			150	
9519	mineral	40-50	5YR 4/4	88	5.0	6.0	7.5	6.6	0.67	0.33	8.7			960	
9520	mineral	40-50	5YR 4/4	87	5.0	8.0	7.2	6.2	1.0	0.46	9.6			900	
9517	mineral	50-70	10YR 6/3	88	4.0	8.0	8.0	7.2	0.21	<0.10	6.2			980	
9518	mineral	50-70	10YR 6/3	87	5.0	7.0	7.8	7.0	0.21	<0.11	7.3			900	
9515	mineral	70+	10YR 5/2	82	10	8.0	8.3	7.5	0.15	<0.090	5.5			1200	
9516	mineral	70+	10YR 5/2	84	9.0	7.0	8.2	7.5	0.15	<0.090	8.5			1300	

SOIL PROFILE INFORMATION (cont'd.)

Site: Rideau River Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9523	surface	590	73	20	8.4	3.7	0.15	0.16	0.0010	0.60	0.32	0.0030	<1.0	21	1.5	2.6	5.6
9524	surface	630	73	20	6.8	3.8	0.18	0.19	0.00080	0.58	0.31	0.0020	<1.0	19	1.7	2.0	5.0
9521	mineral	340	45	<1.6		2.1	0.020	0.020	0.0040	0.18	0.040	0.0010	<1.0	7.1	<1.0	<2.0	<3.0
9522	mineral	390	63	<1.6	<4.5	2.4	0.030	0.030	0.0040	0.11	0.050	0.0010	<1.0	5.5	<1.0	<2.0	<3.0
9519	mineral	560	92	2.5		3.5	0.11	0.16	0.0040	0.51	0.18	0.0020	<1.0	9.9	1.8	4.7	<3.0
9520	mineral	600	92	2.5		3.7	0.10	0.18	0.0040	0.40	0.17	0.0020	<1.0	9.2	1.4	4.6	<3.0
9517	mineral	450	120	<1.6		3.2	0.050	0.020	0.0013	0.66	0.080	0.011	2.0	11	2.9	5.6	<3.0
9518	mineral	400	92	2.5		2.8	0.080	0.030	0.0015	0.72	0.090	0.011	1.0	10	2.2	3.7	<3.0
9515	mineral	390	130	2.5		3.0	0.020	<0.0080	0.00080	0.76	0.050	0.017	2.0	15	6.3	5.3	<3.0
9516	mineral	460	140	2.5		3.4	0.020	<0.0080	0.00050	0.71	0.040	0.017	2.0	15	6.0	4.9	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: South Nation Provincial Park

Date: 80/07/22

Location Code: 4001068

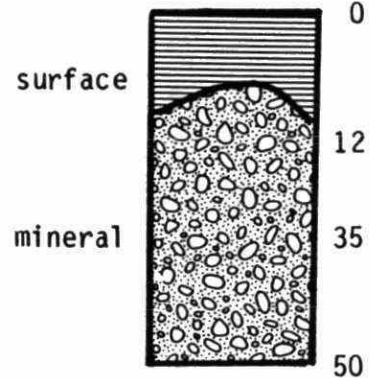
UTM: 18T 495350 5044800

Vegetation: oak, sumac, spruce, pine

Landform: peat and muck

Comments: mica found at 40 cm.
very stoney,
evidence of past disturbance at
40 cm+

Slope: gentle slope



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9535	surface	0-12	10YR 3/1	71	8.0	21	6.7	6.2	8.2	3.8	20			680	
9536	surface	0-12	10YR 3/1	73	6.0	21	6.6	5.9	5.2	2.9	12			510	
9533	mineral	12-35	10YR 3/2	90	5.0	5.0	6.3	5.4	1.4	1.0	5.8			830	
9534	mineral	12-35	10YR 3/2	90	5.0	5.0	6.3	5.3	2.4	0.91	7.2			840	
9531	mineral	35-50	10YR 3/3	87	4.0	9.0	5.6	4.6	1.4	1.1	8.9			1000	
9532	mineral	35-50	10YR 3/3	85	5.0	10	5.8	4.7	1.9	1.1	7.5			970	

SOIL PROFILE INFORMATION (cont'd.)

Site: South Nation Provincial Park

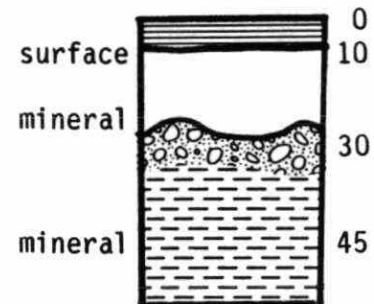
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9535	surface	3700	240	120		20	0.30	0.22	0.036	0.50	0.22	0.021	<1.0	61	13	10	46
9536	surface	3400	180	75		19	0.27	0.19	0.010	0.55	0.22	0.013	<1.0	46	10	10	20
9533	mineral	990	61	40	<2.3	5.4	0.070	0.040	0.011	0.52	0.12	0.025	<1.0	38	9.3		4.2
9534	mineral	1000	66	40	<2.3	5.6	0.090	0.060	0.011	0.65	0.16	0.029	<1.0	54	12	11	7.2
9531	mineral	500	46	25	17	3.1	0.080	0.040	0.0055	0.42	0.10	0.013	<1.0	43	10	18	4.4
9532	mineral	620	56	25	12	3.7	0.15	0.070	0.017	0.66	0.16	0.027	<1.0	49	14		5.6

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Gray's Creek Conservation Area

Date: 80/07/22



Location Code: 4001070

UTM: 18T 526500 4987000

Vegetation: hawthorn, poplar

Landform: clay plain

Comments: stoney at 30 cm+

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9544	surface	0-10	10YR 3/1	27	21	52	6.8	6.4	7.4	4.9	28			1400	
9545	surface	0-10	10YR 3/1	26	21	53	6.7	6.3	14	4.6	29			1400	
9542	mineral	10-30	10YR2.5/1	34	25	42	5.9	5.4	3.7	2.7	18			1100	
9543	mineral	10-30	10YR2.5/1	32	27	41	6.0	5.5	4.3	3.1	18			1200	
9540	mineral	30-45	10YR 4/2	11	18	71	6.6	6.0	1.4	1.3	15			1100	
9541	mineral	30-45	10YR 4/2	10	20	70	6.4	6.0	1.2	1.3	15			860	

SOIL PROFILE INFORMATION (cont'd.)

Site: Gray's Creek Conservation Area

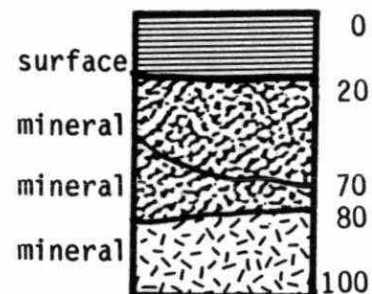
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
9544	surface	4500	610	390		29	0.20	0.11	0.022	1.2	0.19	0.066	<1.0	130	28	32	25
9545	surface	4200	560	390		26	0.23	0.12	0.029	1.2	0.19	0.064	<1.0	120	29	32	25
9542	mineral	2600	510	200		17	0.28	0.13	0.022	1.3	0.22	0.072	<1.0	110	25	34	12
9543	mineral	4100	510	220	<4.5	25	0.27	0.14	0.022	1.3	0.22	0.072	<1.0	110	24	32	13
9540	mineral	3700	720	190		25	0.18	0.060	0.0086	1.4	0.22	0.061	<1.0	140	37	57	11
9541	mineral	3700	760	170		25	0.19	0.060	0.0070	1.6	0.25	0.057	<1.0	140	35	53	9.8

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Golden Lake, Eganville

Date: 80/07/23



Location Code: 4001071

UTM: 18T 328900 5048350

Vegetation: pine

Landform: spillway

Comments:

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9556	surface	0-20	5YR 3/2	92	3.0	5.0	6.5	5.4	1.0	0.53	4.9			580	
9557	surface	0-20	5YR 3/2	93	4.0	3.0	6.3	5.3	0.97	0.60	4.5			670	
9554	mineral	20-40	5YR 4/6	90	3.0	7.0	5.6	5.6	0.15	0.23	3.8			530	
9555	mineral	20-40	5YR 4/6	91	2.0	7.0	6.6	5.6	0.18	<0.11	2.8			390	
9552	mineral	40-50	5YR 5/6	91	1.0	9.0	6.7	5.7	0.17	<0.13	3.3			600	
9553	mineral	40-50	5YR 5/6	93	<1.0	7.0	6.8	5.7	0.13	<0.13	2.2			560	
9550	mineral	50-70	7.5YR 4/4	93	1.0	6.0	6.8	5.8	0.13	<0.10	2.7			470	
9551	mineral	50-70	7.5YR 4/4	93	1.0	6.0	6.6	5.7	0.050	<0.13	2.7			540	
9548	mineral	70-80	5YR 4/6	95	<1.0	6.0	6.7	5.7	0.050	<0.13	2.6			440	
9549	mineral	70-80	5YR 4/6	92	1.0	7.0	6.7	5.7	0.030	<0.10	2.2			590	
9546	mineral	80-100	10YR 5/6	90	<1.0	9.0	6.9	6.0	0.11	<0.13	1.1			610	
9547	mineral	80-100	10YR 5/6	94	<1.0	6.0	6.8	5.9	0.050	<0.12	1.2			440	

SOIL PROFILE INFORMATION (cont'd.)

Site: Golden Lake, Eganville

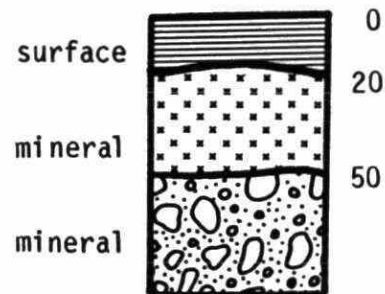
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9556	surface	810	110	39	4.0	5.1	0.040	0.060	0.012	0.49	0.19	0.065	<1.0	60	5.0	60	4.4
9557	surface	430	53	150	6.0	3.0	0.030	0.050	0.0068	0.48	0.18	0.061	<1.0	66	4.7		3.9
9554	mineral	150	18	20		0.97	0.050	0.070	0.0051	0.52	0.20	0.024	<1.0	54	8.3	140	<3.0
9555	mineral	430	16	26		2.3	0.030	0.080	0.0038	0.45	0.16	0.019	<1.0	51	7.4	84	<3.0
9552	mineral	110	11	20		0.69	0.030	0.060	0.0045	0.49	0.14	0.021	<1.0	42	12	190	<3.0
9553	mineral	110	13	12		0.69	0.040	0.040	0.0042	0.50	0.14	0.021	<1.0	37	11	150	<3.0
9550	mineral	150	13	12		0.86	0.030	0.030	0.0038	0.38	0.070	0.026	<1.0	39	12	130	<3.0
9551	mineral	140	13	12		0.82	0.060	0.050	0.0075	0.49	0.11	0.029	<1.0	39	13	260	<3.0
9548	mineral	130	11	10		0.75	0.040	0.030	0.0047	0.45	0.080	0.039	<1.0	39	13	140	<3.0
9549	mineral	110	8.7	10		0.65	0.050	0.040	0.0058	0.42	0.080	0.030	<1.0	39	13	180	<3.0
9546	mineral	150	8.7	17		0.88	0.020	0.010	0.0020	0.29	0.050	0.017	<1.0	36	11	69	<3.0
9547	mineral	160	11	15		0.93	0.030	0.020	0.0041	0.29	0.060	0.018	<1.0	31	10	170	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Carillon Provincial Park

Date: 81/07/13



Location Code: 4001180

UTM: 18T 544650 5048000

Vegetation: cedar, beech, maple

Landform: clay plain/till plain

Comments: some faint mottling at 30 cm.

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17435	surface	0-20	10YR 4/1	32	20	48	6.4	5.9	5.0	3.9			<3.0		0.082
17434	surface	0-20	10YR 4/1	30	19	50	6.2	5.8	5.0	4.1			<3.0		0.11
17433	mineral	20-50	10YR 3/2	42	17	41	7.4	6.8	2.0	2.2			<3.0		<0.080
17432	mineral	20-50	10YR 3/2	36	20	44	7.4	6.8	2.0	1.8			<3.0		<0.080
17412	mineral	50+	10YR 4/4	41	24	35	7.3	6.4	2.0	1.5			<3.0		<0.080
17410	mineral	50+	10YR 4/4	42	23	35	7.3	6.5	4.0	1.4			<3.0		0.10

SOIL PROFILE INFORMATION (cont'd.)

Site: Carillon Provincial Park

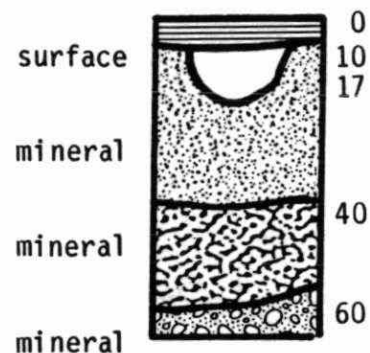
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
17435	surface	2600	460	170		17	0.17	0.084	0.090	2.1	0.24	0.21	<1.0	99	24	32	33
17434	surface	2500	460	180		16	0.16	0.079	0.079	2.1	0.22	0.20	<1.0	100	26	35	34
17433	mineral	2300	440	47		15	0.10	0.060	0.030	2.4	0.22	0.22	2.3	100	27	35	19
17432	mineral	2000	440	47		14	0.10	0.057	0.028	2.4	0.23	0.22	6.1	93	25	35	17
17412	mineral	1800	400	39		12	0.15	0.071	0.029	2.8	0.26	0.20	<1.0	87	31	40	21
17410	mineral	2100	420	39		14	0.13	0.062	0.030	2.7	0.26	0.22	<1.0	71	23	27	15

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Mill Pond Conservation Area

Date: 80/10/07



Location Code: 4001116

UTM: 18T 405900 4958900

Vegetation: beech, white birch, white pine,
ironwood, sugar maple

Landform: shallow till and rock ridges

Slope: level

Comments: very stoney, faint mottles
(5YR 3/4) below 60 cm, irregular,
discontinuous bleached horizon

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
9946	surface	0-10	10YR 3/1	67	25	8.0	5.6	5.1	5.5	3.7	20			410	
9947	surface	0-10	10YR 3/1	57	36	7.0	6.2	5.3	3.0	2.1	6.2			300	
9945	mineral	10-17	5YR 7/1	64	29	7.0	5.9	4.8	0.82	0.48	2.1			150	
9943	mineral	10-40	10YR 5/6				6.2	5.0	1.2	0.52	4.3			230	
9944	mineral	10-40	10YR 5/6	57	32	10	5.8	4.9	1.2	0.62	3.6			280	
9941	mineral	40-60	10YR 6/6	58	32	10	6.1	5.0	0.51	0.30	3.4			410	
9942	mineral	40-60	10YR 6/6	57	33	10	6.1	5.1	0.41	0.26	3.7			380	
9939	mineral	60+	10YR 7/4	62	28	10	6.4	5.4	0.11	0.19	2.1			300	
9940	mineral	60+	10YR 7/4	61	29	10	6.4	5.4	0.13	<0.090	2.4			320	

SOIL PROFILE INFORMATION (cont'd.)

Site: Mill Pond Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
9946	surface	1500	160	87	8.0	9.1	0.16	0.060	0.048	0.46	0.080	0.040	<1.0	87	40	5.6	35
9947	surface	1200	150	65	6.0	7.5	0.13	0.060	0.038	0.49	0.080	0.043	<1.0	59	13		14
9945	mineral	310	45	32	59	2.6	0.10	0.040	0.0052	0.45	0.060	0.018		32	29	3.0	5.5
9943	mineral	380	55	38	14	2.6	0.27	0.24	0.0020	0.96	0.30	0.0090		77	36	11	7.9
9944	mineral	390	64	32	16	2.7	0.23	0.19	0.0021	1.0	0.25	0.018		81	30	8.7	3.9
9941	mineral	300	50	49	<2.3	2.0	0.15	0.11	0.0073	0.69	0.17	0.020	<1.0	34	26	12	3.5
9942	mineral	310	59	49	5.0	2.2	0.14	0.10	0.0064	0.69	0.16	0.026	<1.0	29	27	12	8.5
9939	mineral	430	64	60	<2.3	2.8	0.070	0.040	0.0069	0.67	0.10	0.041	<1.0	26	27	9.2	<3.0
9940	mineral	310	83	65	<2.3	2.4	0.080	0.040	0.0069	0.70	0.10	0.049	<1.0	26	39	11	6.2

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: North Beach Provincial Park

Date: 81/06/02

Location Code: 4001158

UTM: 18T 297450 4869700

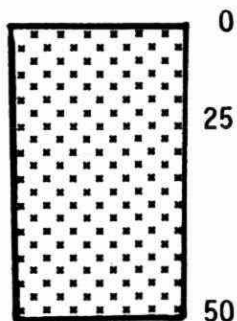
Vegetation: cedar

Landform: sand plain

Comments:

Slope: gentle slopes

mineral



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18075	mineral	0-25	10YR 5/3	96	<1.0	4.0	8.5	7.4	<0.50	0.10			<3.0		<0.080
18074	mineral	0-25	10YR 5/3	95	<1.0	5.0	8.3	7.3	<0.50	0.20			<3.0		<0.080
18077	mineral	25-50	10YR 5/3	96	<1.0	8.0	8.9	7.7	<0.50	0.70			<3.0		<0.080
18076	mineral	25-50	10YR 5/3	96	<1.0	5.0	9.0	7.8	<0.50	0.10			<3.0		<0.14

SOIL PROFILE INFORMATION (cont'd.)

Site: North Beach Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18075	mineral	160	1.0	8.0		0.80	0.0020	0.0020	0.0010	0.063	0.0090	0.0032	20	6.3	<1.0	<2.0	<3.0
18074	mineral	150	1.0	7.0		0.75	0.0030	0.0020	0.0014	0.30	0.0140	0.0032	22	28	1.8	<2.0	<3.0
18077	mineral	250	4.0	12		1.3	0.0030	0.0020	0.0010	0.20	0.0090	0.0029	21	10	1.2	<2.0	<3.0
18076	mineral	290	7.0	11		1.5	0.0050	0.0040	0.0015	0.38	0.011	0.0039	18	25	2.2	<2.0	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: McCauley Mountain Conservation Area

Date: 81/06/02

surface

mineral

mineral



Location Code: 4001159

UTM: 18T 329050 4873000

Landform: limestone plain

Slope: level

Vegetation: mixed forest

Comments: faint mottling in 17-30 cm depth

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18079	surface	0-17	10YR 3/3	52	20	28	7.5	7.0	2.0	1.7			<3.0		<0.080
18080	surface	0-17	10YR 3/3	52	18	29	7.5	7.0	2.0	1.7			<3.0		0.14
18081	mineral	17-30	10YR 3/4	52	18	31	7.7	7.1	1.0	0.70			<3.0		<0.080
18082	mineral	17-30	10YR 3/4	56	15	28	7.6	7.0	1.0	0.70			<3.0		<0.080
18083	mineral	30-50	10YR 5/4	65	17	19	8.0	7.4	1.0	0.50			<3.0		<0.080
18084	mineral	30-50	10YR 5/4	63	14	23	8.0	7.6	<0.50	0.40			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: McCauley Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18079	surface	2600	54	60		14	0.090	0.057	0.012	0.82	0.16	0.023	2.0	58	7.9	10	12
18080	surface	2100	54	63		11	0.089	0.054	0.0094	0.88	0.17	0.022	2.0	59	8.0	11	6.5
18081	mineral	1600	47	55		8.5	0.11	0.063	0.0058	0.85	0.17	0.018	2.0	43	10	13	<3.0
18082	mineral	1700	50	60		9.1	0.093	0.056	0.0040	0.74	0.14	0.012	2.0	38	7.9	11	4.1
18083	mineral	950	22	41		5.0	0.054	0.040	0.0026	0.64	0.13	0.030	5.9	32	10	11	<3.0
18084	mineral	1100	22	41		5.6	0.038	0.030	0.0014	0.50	0.11	0.027	5.8	27	9.3	10	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Railton

Date: 81/06/03

Location Code: 4001160

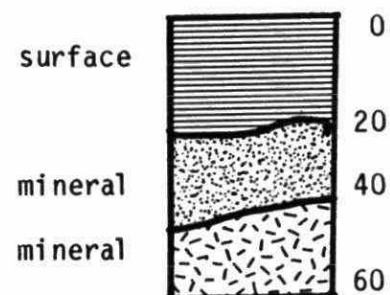
UTM: 18T 377350 4915450

Vegetation: beech, grasses

Landform: limestone till plain

Comments: near A.P.I.O.S. precipitation collector

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18073	surface	0-20	10YR 3/2	54	29	17	4.9	4.2	2.0	2.6			7.0		6.3
18072	surface	0-20	10YR 3/2	47	27	26	5.7	5.1	3.0	3.6			5.0		1.4
18071	mineral	20-40	10YR 5/6	53	33	15	5.1	4.3	2.0	0.90			<3.0		5.7
18070	mineral	20-40	10YR 5/6	55	30	14	5.1	4.3	1.0	0.90			5.0		6.7
18069	mineral	40-60	10YR 4/4	56	30	14	5.3	4.4	1.0	0.40			5.0		0.98
18068	mineral	40-60	10YR 4/4	63	25	12	5.2	4.4	1.0	0.60			<3.0		1.5

SOIL PROFILE INFORMATION (cont'd.)

Site: Railton

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18073	surface	940	110	130	100	6.9	0.37	0.21	0.0020	0.86	0.23	0.0035		39	3.6	6.1	<3.0
18072	surface	1500	260	200	<4.5	10	0.25	0.14	0.0061	0.58	0.16	0.0093	<1.0	40	4.5	5.8	7.6
18071	mineral	170	27	52	120	2.4	0.37	0.32	0.0028	0.98	0.38	0.0098		67	7.4	16	<3.0
18070	mineral	120	18	45	110	2.0	0.38	0.30	0.0027	0.98	0.36	0.011		56	8.1	14	<3.0
18069	mineral	530	100	45	52	4.1	0.13	0.095	0.0022	0.61	0.12	0.031		32	7.7	14	<3.0
18068	mineral	420	73	48	72	3.5	0.12	0.10	0.0022	0.69	0.14	0.033		34	8.8	15	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Railton Date: 81/06/03

Location Code: 4001161

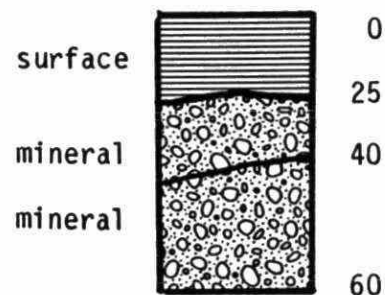
UTM: 18T 373050 4914550

Vegetation: coniferous forest

Landform: till plain and rock ridges

Comments: depth to bedrock 60 cm.
near A.P.I.O.S. precipitation collector

Slope: nearly level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18090	surface	0-25	5YR 2.5/2	65	14	20	7.1	6.6	4.0	2.4			<3.0		0.10
18089	surface	0-25	5YR 2.5/2	58	21	21	7.0	6.5	3.0	2.3			<3.0		0.11
18088	mineral	25-40	5YR 3/4	71	10	19	7.4	6.8	1.0	0.90			<3.0		<0.080
18087	mineral	25-40	5YR 3/4	74	10	16	7.6	6.9	1.0	0.60			<3.0		<0.080
18086	mineral	40-60	5YR 3/4	76	10	15	7.5	6.9	1.0	0.70			<3.0		<0.080
18085	mineral	40-60	5YR 3/4	74	12	14	7.5	7.0	1.0	0.70			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Railton

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18090	surface	2000	82	62		11	0.15	0.11	0.048	1.3	0.24	0.11	<1.0	80	15	18	19
18089	surface	1800	92	62		9.7	0.17	0.11	0.042	1.1	0.22	0.066	<1.0	74	13	16	16
18088	mineral	1200	45	36		6.5	0.12	0.082	0.019	0.98	0.17	0.076	<1.0	46	10	15	3.5
18087	mineral	1100	31	30		5.7	0.13	0.088	0.020	1.3	0.24	0.14	<1.0	46	18	24	4.5
18086	mineral	1300	41	41		6.8	0.073	0.056	0.0098	1.2	0.22	0.14	<1.0	40	16	20	<3.0
18085	mineral	1200	41	43		6.3	0.077	0.056	0.010	1.3	0.24	0.16	<1.0	39	17	20	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Whitman Creek

Date: 81/06/03

Location Code: 4001162

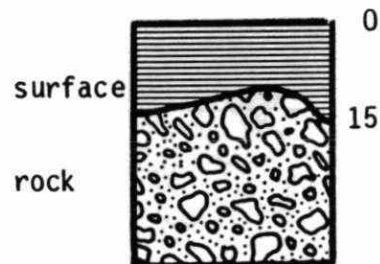
UTM: 18T 352650 4926450

Vegetation: maple

Landform: limestone plain

Comments: depth to bedrock 15 cm.
near A.P.I.O.S. precipitation
collector

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18092	surface	0-15		54	26	21	7.4	7.0	4.0	2.6			20		0.27
18091	surface	0-15		56	23	22	7.4	7.0	4.0	2.8			19		0.22

SOIL PROFILE INFORMATION (cont'd.)

Site: Whitman Creek

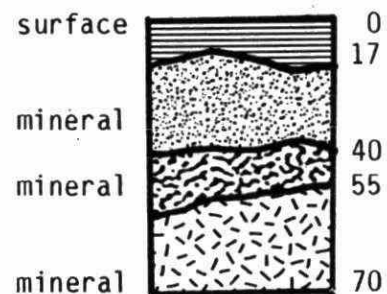
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18092	surface	3100	210	230		18	0.17	0.074	0.024	0.68	0.10	0.044	3.0	66	6.4	7.3	8.7
18091	surface	3300	220	220		19	0.16	0.073	0.028	0.70	0.11	0.050	2.0	72	7.4	7.7	8.1

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Vanderwater Conservation Area

Date: 81/06/09



Location Code: 4001172

UTM: 18T 315500 4916650

Vegetation: pine forest

Landform: moraine

Comments: some large stones

Slope: nearly level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18105	surface	0-17	5YR 3/1	79	11	9.0	5.7	5.0	3.0	1.6			<3.0		0.50
18104	surface	0-17	5YR 3/1	77	9	14	6.1	5.4	3.0	2.0			<3.0		0.44
18103	mineral	17-40	7.5YR 4/6	90	6.0	3.0	6.3	5.5	1.0	0.60			<3.0		0.32
18102	mineral	17-40	7.5YR 4/6	92	5.0	3.0	6.3	5.5	1.0	0.60			<3.0		0.21
18101	mineral	40-55	7.5YR 5/4	90	5.0	4.0	6.4	5.7	1.0	0.30			<3.0		0.27
18100	mineral	40-55	7.5YR 5/4	83	13	4.0	6.4	5.5	1.0	0.30			<3.0		0.25
18099	mineral	55-70	7.5YR 4/4	83	12	4.0	6.4	5.7	1.0	0.30			<3.0		0.53
18098	mineral	55-70	7.5YR 4/4	82	12	6.0	6.6	5.8	1.0	0.30			<3.0		0.10

SOIL PROFILE INFORMATION (cont'd.)

Site: Vanderwater Conservation Area

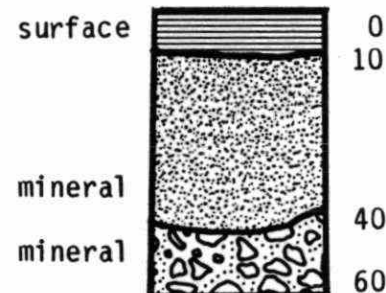
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18105	surface	660	38	19	5.0	3.7	0.21	0.16	0.022	0.87	0.20	0.034	<1.0	52	3.9	8.0	5.8
18104	surface	930	61	34	<4.5	5.2	0.24	0.16	0.032	0.77	0.17	0.037	<1.0	59	4.5	7.8	11
18103	mineral	600	11	5.0		3.1	0.30	0.25	0.0021	0.89	0.33	0.0084	<1.0	43	3.2	10	<3.0
18102	mineral	540	9.0	5.0		2.8	0.19	0.18	0.0014	0.72	0.26	0.0063	<1.0	35	2.4	7.7	<3.0
18101	mineral	430	9.0	5.0		2.2	0.15	0.17	0.0024	0.60	0.22	0.011	<1.0	30	1.9	9.1	<3.0
18100	mineral	410	7.0	5.0		2.1	0.17	0.20	0.0047	0.62	0.21	0.012	<1.0	22	2.3	8.8	<3.0
18099	mineral	370	5.0	6.0		1.9	0.098	0.12	0.0040	0.46	0.13	0.021	<1.0	22	3.7	9.5	<3.0
18098	mineral	550	17	11		2.9	0.091	0.11	0.0050	0.55	0.13	0.031	<1.0	22	3.2	9.5	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: O'Hara Mill Conservation Area

Date: 81/06/09



Location Code: 4001177

UTM: 18T 295950 4932150

Vegetation: maple, hemlock

Landform: shallow till and rock ridges

Comments: shale at 60 cm.

Slope: very gentle slopes

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18097	surface	0-10	10YR 3/2	35	43	22	6.0	5.6	2.0	3.2			<3.0		0.25
18096	mineral	10-40	7.5YR 4/4	39	55	6.0	5.6	4.8	1.0	0.50			<3.0		0.80
18095	mineral	10-40	7.5YR 4/4	42	50	8.0	5.5	4.7	1.0	0.50			<3.0		0.97
18094	mineral	40-60	10YR 4/6	55	38	7.0	5.8	4.9	<0.50	0.30			<3.0		0.17
18093	mineral	40-60	10YR 4/6	48	46	7.0	5.8	4.9	<0.50	0.30			<3.0		0.25

SOIL PROFILE INFORMATION (cont'd.)

Site: O'Hara Mill Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18097	surface	2000	220	310		12	0.18	0.15	0.017	0.84	0.22	0.026	<1.0	58	5.3	7.0	<3.0
18096	mineral	440	34	100	24	2.9	0.25	0.14	0.0059	1.00	0.18	0.027		58	6.9	6.0	<3.0
18095	mineral	360	31	120	33	2.7	0.21	0.14	0.0047	0.92	0.18	0.021		51	6.4	6.5	<3.0
18094	mineral	550	52	38	9	3.4	0.10	0.073	0.0018	0.56	0.090	0.028		30	6.5	9.5	<3.0
18093	mineral	590	50	46	11	3.6	0.12	0.075	0.0023	0.76	0.10	0.036		40	9.0	9.9	<3.0

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Sharbot Lake Provincial Park	Date: 81/06/11
surface	0	Location Code: 4001178	
	10	UTM: 18T 363650 4959650	Vegetation: maple, oak
mineral		Landform: shallow till and rock ridge	Comments: depth to granite bedrock 70 cm, evidence of bleached horizon.
mineral	40	Slope: very strong slopes	
	70		

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18129	surface	0-10	5YR 3/1	68	22	10	5.3	4.5	4.0	2.5			18		1.7
18128	surface	0-10	5YR 3/1	70	22	7.0	5.4	4.5	2.0	2.5			12		1.3
18127	mineral	10-40	5YR 4/4	78	19	3.0	5.4	4.5	1.0	0.80			8.0		2.1
18126	mineral	10-40	5YR 4/4	79	18	3.0	5.5	4.6	1.0	0.70			<3.0		2.3
18125	mineral	40-70	10YR 5/6	83	14	3.0	5.5	4.6	1.0	0.30			4.0		1.8
18124	mineral	40-70	10YR 5/6	83	15	2.0	5.6	4.6	1.0	0.30			<3.0		0.20

SOIL PROFILE INFORMATION (cont'd.)

Site: Sharbot Lake Provincial Park

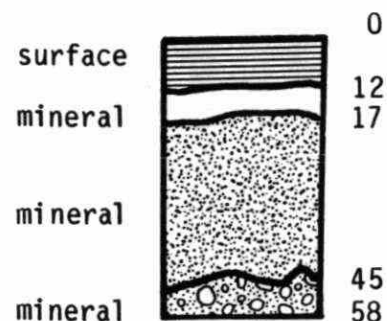
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18129	surface	940	99	83	11	5.8	0.21	0.18	0.048	0.89	0.25	0.100		88	7.1	10	6.5
18128	surface	970	100	66	11	5.9	0.25	0.18	0.040	1.0	0.32	0.090		100	6.6	11	8.6
18127	mineral	150	18	6.0	16	1.1	0.16	0.18	0.0048	1.1	0.40	0.014		74	12	18	<3.0
18126	mineral	160	18	5.0	18	1.2	0.20	0.24	0.0056	1.1	0.39	0.016		71	10	15	<3.0
18125	mineral	180	20	9.0	16	1.2	0.16	0.17	0.0081	0.89	0.22	0.025		50	14	15	<3.0
18124	mineral	180	13	6.0	14	1.1	0.15	0.15	0.0080	0.95	0.21	0.030		53	14	15	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Silver Lake Provincial Park

Date: 81/06/09



Location Code: 4001179

UTM: 18T 375300 4965350

Vegetation: maple, hemlock, grasses, mosses

Landform: shallow till and rock ridges

Comments: weathered granitic bedrock at 58 cm, earthworms throughout profile.

Slope: very gentle slope

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18113	surface	0-12	5YR 2.5/1	73	18	9.0	5.3	4.8	4.0	2.5			8.0		1.6
18112	surface	0-12	5YR 2.5/1	64	25	11	5.2	4.7	4.0	3.0			9.0		2.1
18111	mineral	12-17	7.5YR 4/2	66	27	6.0	5.0	4.3	1.0	1.1			<3.0		2.3
18110	mineral	17-45	7.5YR 4/4	66	28	6.0	5.5	4.7	2.0	1.0			<3.0		1.9
18109	mineral	17-45	7.5YR 4/4	71	23	6.0	5.5	4.7	2.0	0.80			<3.0		1.6
18108	mineral	45-58	7.5YR 4/4	72	25	2.0	5.5	4.8	2.0	0.80			<3.0		1.6
18107	mineral	45-58	7.5YR 4/4	69	28	3.0	5.6	4.8	1.0	0.70			<3.0		1.5
18106	mineral	58+		89	7.0	5.0	5.6	4.6	1.0	0.20			<3.0		2.5

SOIL PROFILE INFORMATION (cont'd.)

Site: Silver Lake Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18113	surface	2300	240	77	<4.5	14	0.17	0.096	0.019	0.78	0.13	0.027		58	10	30	12
18112	surface	3300	360	120	5.0	20	0.19	0.081	0.013	0.60	0.12	0.018		49	8.6	26	9.6
18111	mineral	990	120	75	12	6.3	0.26	0.12	0.0044	0.89	0.15	0.0089		49	8.1	27	<3.0
18110	mineral	670	100	56	16	4.5	0.40	0.30	0.0011	1.5	0.53	0.0056		99	21	92	<3.0
18109	mineral	630	100	83	22	4.4	0.51	0.33	0.0011	1.6	0.52	0.0056		100	19	88	<3.0
18108	mineral	710	110	46	22	4.7	0.68	0.60	0.0027	1.2	0.60	0.0063		66	23	89	<3.0
18107	mineral	780	120	73	33	5.4	0.29	0.27	0.0011	1.1	0.44	0.0065		53	21	84	<3.0
18106	mineral	850	190	120	42	6.4	0.31	0.19	0.0028	0.84	0.24	0.011		47	12	110	<3.0

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Wilberforce Township - Pembroke

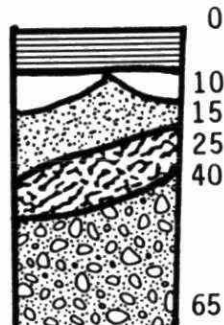
Date: 81/07/14

surface
mineral

mineral

mineral

mineral



Location Code: 4001181

UTM: 18T 328400 5061400

Landform: sand plain

Slope: very gentle slopes

Vegetation: red oak, white birch, red maple,
white pine, white spruce

Comments: moderately stoney (granitic)
at 30-65 cm

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17445	surface	0-10	10YR 2/1	69	19	12	4.1	3.4	9.0	6.8			28		17
17444	surface	0-10	10YR 2/1				4.2	3.4	23	18			58		11
17443	mineral	10-15	10YR 6/2	80	17	3.0	4.5	3.5	1.0	0.40			<3.0		4.7
17442	mineral	10-15	10YR 6/2	79	13	8.0	4.4	3.4	1.0	0.70			<3.0		4.6
17441	mineral	15-25	7.5YR 4/6	91	1.0	8.0	5.2	4.4	2.0	0.90			<3.0		4.4
17440	mineral	15-25	7.5YR 4/6	92	1.0	7.0	5.3	4.5	2.0	0.80			<3.0		2.7
17439	mineral	25-40	10YR 4/6	92	1.0	7.0	5.3	4.6	2.0	0.50			<3.0		2.4
17438	mineral	25-40	10YR 4/6	91	7.0	3.0	5.4	4.6	2.0	0.40			<3.0		2.3
17437	mineral	40-65	10YR 5/8	88	5.0	7.0	5.2	4.6	1.0	0.40			<3.0		2.1
17436	mineral	40-65	10YR 5/8	86	6.0	8.0	5.3	4.6	1.0	0.50			<3.0		1.8

SOIL PROFILE INFORMATION (cont'd.)

Site: Wilberforce Township - Pembroke

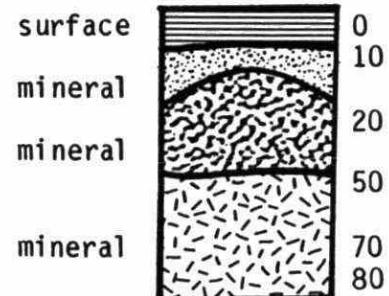
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17445	surface	2600	260	350	44	17	0.15	0.082	0.010	0.44	0.13	0.010		51	7.2	7.0	47
17444	surface	3500	410	420	23	22	0.14	0.095	0.0094	0.38	0.14	0.0099		64	10	10	98
17443	mineral	180	18	26	51	1.6	0.028	0.019	<0.00010	0.17	0.026	0.00030		9.5	1.7	<2.0	<3.0
17442	mineral	290	33	29	64	2.4	0.056	0.030	<0.00010	0.23	0.041	0.00060		8.5	1.6	<2.0	<3.0
17441	mineral	110	9.0	11	44	1.1	0.59	0.66	0.00080	1.5	0.99	0.0020		40	10	10	<3.0
17440	mineral	63	6.0	8.0	13	0.52	0.25	0.41	0.00040	1.2	0.85	0.0013		37	11	10	<3.0
17439	mineral	56	4.0	8.0	15	<0.50	0.22	0.33	0.00070	0.94	0.72	0.0018		30	12	8.3	<3.0
17438	mineral	44	4.0	7.0	11	<0.50	0.16	0.29	0.00040	0.94	0.67	0.0010		26	11	8.8	<3.0
17437	mineral	32	4.0	7.0	13	<0.50	0.12	0.21	0.00030	1.4	0.56	0.0018		27	11	8.7	<3.0
17436	mineral	32	4.0	7.0	8.0	<0.50	0.12	0.25	0.00030	0.88	0.55	0.0018		27	14	10	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Carson Lake Provincial Park

Date: 81/07/14



Location Code: 4001182

UTM: 18T 285350 5042300

Vegetation: maple, beech, red pine

Landform: shallow till and rock ridges

Slope: nearly level

Comments: many medium mottles at 70 cm
mottle colour 10YR 6/8

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17455	surface	0-10	10YR 3/1	17	63	20	5.4	4.7	10	5.5			9.0		3.1
17454	surface	0-10	10YR 3/1	18	62	20	5.4	4.7		5.1			9.0		2.6
17453	mineral	10-20	10YR 3/6	24	69	7.0	5.4	4.6	2.0	1.8			<3.0		2.7
17452	mineral	10-20	10YR 3/6	21	73	6.0	5.4	4.6	2.0	2.1			<3.0		3.6
17451	mineral	20-50	10YR 3/4	26	70	4.0	5.2	4.5	1.0	1.1			5.0		3.6
17450	mineral	20-50	10YR 3/4	32	64	4.0	5.2	4.5	1.0	1.0			6.0		3.9
17449	mineral	50-70	10YR 3/4	37	60	3.0	5.2	4.5	1.0	0.60			<3.0		3.7
17448	mineral	50-70	10YR 3/4	45	52	3.0	5.3	4.5	1.0	0.50			<3.0		3.4
17447	mineral	70-80	10YR 6/4	66	31	3.0	5.3	4.6	<0.50	0.30			<3.0		2.8
17446	mineral	70-80	10YR 6/4	68	29	3.0	5.3	4.6	<0.50	0.30			<3.0		2.4

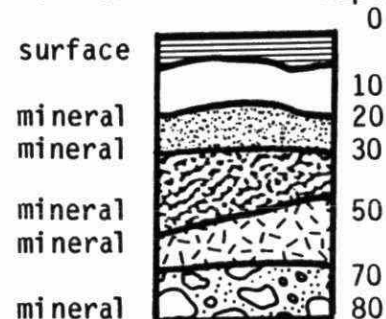
SOIL PROFILE INFORMATION (cont'd.)

Site: Carson Lake Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17455	surface	980	94	130	28	6.3	0.35	0.26	0.030	0.71	0.40	0.038		49	6.2	4.8	7.5
17454	surface	1300	110	130	21	8.0	0.36	0.29	0.030	0.74	0.45	0.037		51	6.2	5.7	7.8
17453	mineral	250	15	41	34	1.8	0.41	0.44	0.0020	1.0	0.72	0.0028		47	7.2	6.6	<3.0
17452	mineral	310	18	53	38	2.2	0.58	0.57	0.0021	1.1	0.72	0.0035		49	6.7	7.0	<3.0
17451	mineral	150	9.0	23	33	1.2	0.18	0.20	0.0011	0.79	0.44	0.0025		38	9.2	8.3	<3.0
17450	mineral	150	9.0	26	33	1.2	0.17	0.20	0.0013	0.80	0.45	0.0028		39	9.7	8.6	<3.0
17449	mineral	87	6.0	17	34	0.87	0.20	0.20	0.00040	0.61	0.33	0.0018		32	9.7	8.0	<3.0
17448	mineral	87	3.0	17	29	0.79	0.19	0.18	0.00040	0.58	0.31	0.00080		29	10	7.8	<3.0
17447	mineral	71	3.0	8.0	19	0.59	0.15	0.15	0.00040	0.55	0.23	0.00050		26	10	6.2	<3.0
17446	mineral	63	3.0	14	19	0.57	0.14	0.14	0.00040	0.55	0.24	0.00030		26	11	6.1	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)



Site: Lake St. Peter Provincial Park

Date: 81/07/14

Location Code: 3001183

UTM: 17T 733250 5022900

Vegetation: birch, maple, poplar

Landform: lacustrine deposit

Slope: level

Comments: very stoney at 70 cm
(gravel lakebed)

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
17467	surface	0-10	10YR 2/1	85	11	5.0	5.1	4.4	4.0	2.4			6.0		2.8
17466	surface	0-10	10YR 2/1	80	13	7.0	5.1	4.4	6.0	3.0			6.0		4.9
17465	mineral	10-20	10YR 7/1	90	8.0	2.0	5.0	4.2	1.0	0.70			<3.0		2.3
17464	mineral	10-20	10YR 7/1	88	8.0	4.0	4.9	4.0	2.0	0.80			5.0		3.0
17463	mineral	20-30	7.5YR 3/4	92	4.0	4.0	5.4	4.5	4.0	1.1			<3.0		2.8
17462	mineral	20-30	7.5YR 3/4	90	6.0	4.0	5.4	4.5	5.0	1.2			<3.0		3.8
17461	mineral	30-50	10YR 4/6	95	2.0	2.0	5.4	4.6	3.0	0.60			4.0		2.5
17460	mineral	30-50	10YR 4/6	98	<1.0	2.0	5.4	4.7	2.0	0.30			<3.0		1.2
17459	mineral	50-70	10YR 4/6	98	<1.0	2.0	5.5	4.8	1.0	0.20			<3.0		1.1
17458	mineral	50-70	10YR 4/6	98	<1.0	2.0	5.4	4.7	1.0	0.20			<3.0		1.2
17457	mineral	70-80	2.5YR 6/6	97	<1.0	3.0	5.4	4.6	1.0	0.30			<3.0		1.5
17456	mineral	70-80	2.5YR 6/6	97	<1.0	2.0	5.3	4.6	1.0	0.40			<3.0		1.7

SOIL PROFILE INFORMATION (cont'd.)

Site: Lake St. Peter Provincial Park

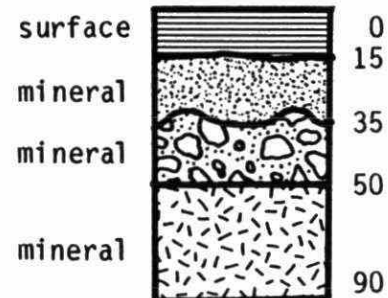
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
17467	surface	1700	120	170	6.0	10	0.17	0.073	0.045	0.40	0.10	0.063		69	5.7	4.0	25
17466	surface	3000	170	260	13	17	0.16	0.076	0.050	0.42	0.12	0.077		87	7.2	3.9	29
17465	mineral	280	19	27	23	1.9	0.21	0.068	0.0078	0.46	0.099	0.014		27	3.0	2.3	<3.0
17464	mineral	280	21	37	40	2.0	0.21	0.071	0.0085	0.50	0.11	0.013		25	3.2	<2.0	<3.0
17463	mineral	150	6.0	20	23	1.1	1.1	0.88	0.0057	2.0	1.3	0.013		76	10	6.2	3.9
17462	mineral	140	6.0	20	29	1.1	1.4	1.0	0.0045	2.0	1.4	0.011		74	9.2	6.2	<3.0
17461	mineral	48	2.0	8.0	10	<0.50	0.38	0.60	0.0023	1.0	0.87	0.0068		62	13	8.7	<3.0
17460	mineral	44	2.0	10	8.0	<0.50	0.21	0.37	0.0019	0.90	0.75	0.0056		74	18	12	<3.0
17459	mineral	36	2.0	7.0	6.0	<0.50	0.14	0.20	0.0013	0.95	0.60	0.0056		39	26	10	<3.0
17458	mineral	36	2.0	7.0	6.0	<0.50	0.14	0.28	0.0017	0.87	0.55	0.0083		35	25	10	<3.0
17457	mineral	40	4.0	20	8.0	<0.50	0.15	0.20	0.0009	0.62	0.45	0.0033		26	23	7.6	<3.0
17456	mineral	36	1.0	13	9.0	<0.50	0.13	0.17	0.0005	0.58	0.36	0.0015		21	18	6.0	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Palmerston-Canonto Conservation Area

Date: 81/06/11



Location Code: 1001189

UTM: 18T 356000 498850

Vegetation: white birch, grasses

Landform: shallow till and rock ridges

Slope: level

Comments: earthworms throughout profile, organic mottles at 35 and 50 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18137	surface	0-15	10YR 3/2				6.6	6.0	4.0	2.0			<3.0		0.15
18136	surface	0-15	10YR 3/2	81	15	4.0	6.6	6.0	4.0	1.7			<3.0		0.13
18135	mineral	15-35	7.5YR 5/4	82	10	8.0	6.4	5.7	1.0	0.50			<3.0		0.44
18134	mineral	15-35	7.5YR 5/4	79	11	11	6.4	5.5	1.0	0.60			<3.0		<0.080
18133	mineral	35-50	10YR 5/8	85	6.0	9.0	6.9	6.0	1.0	0.30			<3.0		<0.080
18132	mineral	35-50	10YR 5/8	88	7.0	6.0	6.6	5.7	<0.50	0.20			<3.0		0.56
18131	mineral	50-90		89	5.0	6.0	6.7	5.9	<0.50	0.10			<3.0		<0.080
18130	mineral	50-90		88	5.0	7.0	6.6	5.8	<0.50	0.20			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Palmerston-Canonto Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18137	surface	1300	160	44		7.7	0.18	0.13	0.050	1.3	0.27	0.24	<1.0	130	16	11	23
18136	surface	1300	160	40		7.7	0.21	0.14	0.052	1.2	0.27	0.27	<1.0	120	15	9.6	18
18135	mineral	530	34	34		3.0	0.17	0.20	0.0087	1.1	0.32	0.038	<1.0	90	9.4	16	5.2
18134	mineral	560	39	20		3.2	0.22	0.19	0.012	1.2	0.36	0.047	<1.0	98	9.1	16	<3.0
18133	mineral	490	16	9.0		2.6	0.099	0.10	0.010	0.93	0.18	0.037	<1.0	38	13	14	4.3
18132	mineral	360	13	9.0		2.0	0.081	0.077	0.0042	0.82	0.14	0.025	<1.0	30	11	12	<3.0
18131	mineral	530	16	15		2.8	0.065	0.037	0.0032	1.0	0.13	0.052	<1.0	43	17	15	3.4
18130	mineral	540	16	13		2.9	0.061	0.037	0.0051	0.86	0.12	0.053	<1.0	27	14	11	5.4

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Harcourt Crown Land, Bancroft

Date: 81/08/18

Location Code: 3001212

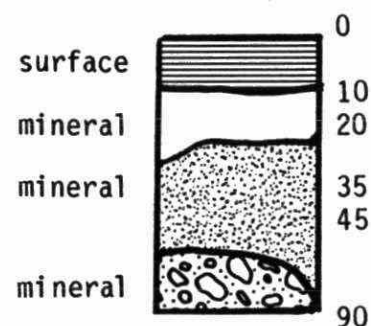
UTM: 17T 723500 4994350

Vegetation: maple, aspen, shrubs

Landform: spillway

Slope: level

Comments: very stoney at 35-90 cm



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18391	surface	0-10	10YR 3/1	75	18	7.0	5.5	4.8	4.0	3.0			14		1.7
18390	surface	0-10	10YR 3/1	70	21	8.0	5.5	4.9	4.0	4.4			27		2.2
18389	mineral	10-20	10YR 4/4	74	21	5.0	5.0	4.2	3.0	1.8			24		5.8
18388	mineral	20-35	5YR 4/6	87	11	2.0	5.6	4.8	4.0	1.0			12		1.9
18387	mineral	20-35	5YR 4/6	88	11	1.0	5.7	4.9	4.0	1.4			5.0		1.8
18386	mineral	35-45	10YR 5/6	87	12	1.0	5.8	4.9	2.0	0.60			<3.0		1.3
18385	mineral	45-90	10YR 6/4	82	17	1.0	5.7	4.8	1.0	0.30			<3.0		1.1
18384	mineral	45-90	10YR 6/4	90	10	<1.0	5.8	4.9	<0.50	0.20			<3.0		1.1

SOIL PROFILE INFORMATION (cont'd.)

Site: Harcourt Crown Land, Bancroft

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18391	surface	1000	140	120	4.0	6.5	0.31	0.21	0.018	0.83	0.22	0.022		54	6.7	3.8	13
18390	surface	1500	210	150	8.0	9.6	0.48	0.22	0.014	0.93	0.27	0.019		56	6.7	3.8	15
18389	mineral	1200	68	60	61	7.3	0.28	0.14	0.0017	0.81	0.16	0.0043		27	4.7	4.2	6.1
18388	mineral	480	43	56	20	3.1	0.82	0.62	0.0014	1.7	0.92	0.0066		54	8.2	6.6	<3.0
18387	mineral	460	37	48	19	2.9	0.53	0.59	0.0011	1.3	0.95	0.0059		50	7.2	6.1	<3.0
18386	mineral	130	12	37	14	0.99	0.23	0.29	0.00080	0.76	0.55	0.0026		45	13	9.0	<3.0
18385	mineral	41	3.0	21	9.0	<0.50	0.063	0.17	0.00030	0.37	0.23	0.0043		20	9.8	7.0	<3.0
18384	mineral	34	3.0	24	7.0	<0.50	0.039	0.12	0.00030	0.35	0.19	0.0045		18	9.7	7.5	<3.0

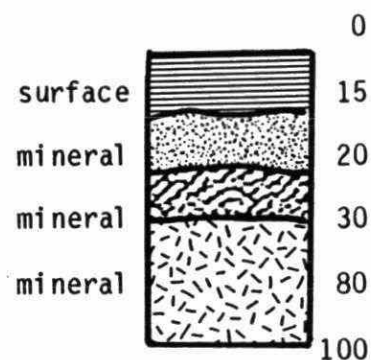
SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Combermere Crown Land

Date: 81/08/18



Location Code: 4001213

UTM: 18T 297000 5025000

Vegetation: birch, grasses

Landform: spillway

Slope: level

Comments: varves at depth, LFH horizon was not sampled

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18400	mineral	15-20	10YR 3/2	90	8.0	2.0	5.0	4.4	2.0	0.70			7.0		5.2
18399	mineral	20-30	10YR 5/6	98	2.0	<1.0	5.7	5.0	2.0	0.40			4.0		0.64
18398	mineral	20-30	10YR 5/6	99	3.0	<1.0	5.7	4.9	2.0	0.50			5.0		0.62
18397	mineral	30-80	10YR 6/6	99	1.0	<1.0	5.9	5.3	1.0	<0.10			5.0		<0.080
18396	mineral	30-80	10YR 6/6	99	1.0	<1.0	5.9	5.4	1.0	1.6			6.0		<0.080
18395	mineral	80-100	10YR 6/6	94	2.0	4.0	5.9	5.4	<0.50	<0.10			6.0		<0.080
18394	mineral	80-100	10YR 6/6	99	1.0	<1.0	5.9	5.4	<0.50	<0.10			7.0		<0.080
18393	mineral	100-120	10YR 6/4	99	1.0	<1.0	5.9	5.2	<0.50	<0.10			4.0		0.090
18392	mineral	100-120	10YR 6/4	100	<1.0	<1.0	5.7	5.1	<0.50	<0.10			3.0		0.096

SOIL PROFILE INFORMATION (cont'd.)

Site: Combermere Crown Land

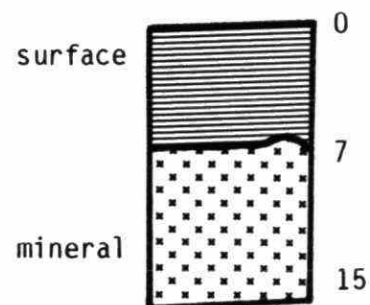
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18400	mineral	30	2.0	9.0	38	0.57	0.16	0.24	0.0083	0.69	0.40	0.028		45	7.8	5.1	5.4
18399	mineral	49	3.0	9.0	4.0	<0.50	0.072	0.17	0.0013	0.94	0.63	0.0090	<1.0	61	14	10	<3.0
18398	mineral	45	3.0	9.0	4.0	<0.50	0.087	0.20	0.0021	0.94	0.64	0.012		60	12	10	<3.0
18397	mineral	34	2.0	10	<2.3	<0.50	0.026	0.13	0.00040	0.60	0.30	0.0047	<1.0	35	18	9.3	<3.0
18396	mineral	34	3.0	14	<2.3	<0.50	0.011	0.069	<0.00010	0.66	0.30	0.0052	<1.0	33	19	9.5	<3.0
18395	mineral	30	2.0	11	<2.3	<0.50	0.018	0.088	0.00040	0.59	0.21	0.0033	<1.0	24	16	8.1	<3.0
18394	mineral	30	2.0	12	<2.3	<0.50	0.015	0.070	0.00040	0.51	0.16	0.0040	<1.0	22	17	7.7	<3.0
18393	mineral	26	2.0	15	<2.3	<0.50	0.0040	0.026	<0.00010	0.31	0.065	0.0045	<1.0	18	13	6.3	<3.0
18392	mineral	15	2.0	12	<2.3	<0.50	0.0070	0.031	0.00020	0.36	0.068	0.0085	<1.0	21	14	5.9	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: K & P Trail, Barryvale

Date: 81/08/19



Location Code: 4001214

UTM: 18T 364200 501360

Vegetation: oak, birch

Landform: shallow till and rock ridges

Slope: very strong slopes

Comments: depth to bedrock 15 cm
very stoney at 7-15 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18402	surface	0-7	10YR 3/3	76	12	12	6.6	6.2	4.0	3.3			4.0		0.62
18401	mineral	7-15	10YR 4/6	81	15	4.0	6.4	5.8	1.0	0.40			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: K & P Trail, Barryvale

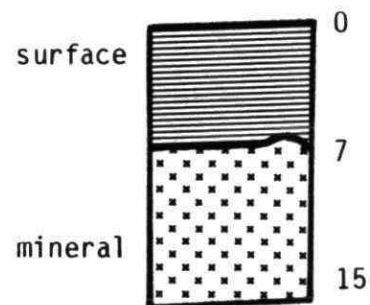
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18402	surface	740	10	20		3.8	0.067	0.027	0.026	1.1	0.12	0.045	<1.0	64	21	14	23
18401	mineral	490	140	75		3.7	0.046	0.019	0.0026	0.59	0.079	0.012	<1.0	32	8.9	8.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: K & P Trail, Barryvale

Date: 81/08/19



Location Code: 4001214

UTM: 18T 364200 501360

Vegetation: oak, birch

Landform: shallow till and rock ridges

Slope: very strong slopes

Comments: depth to bedrock 15 cm
very stoney at 7-15 cm.

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18402	surface	0-7	10YR 3/3	76	12	12	6.6	6.2	4.0	3.3			4.0		0.62
18401	mineral	7-15	10YR 4/6	81	15	4.0	6.4	5.8	1.0	0.40			<3.0		<0.080

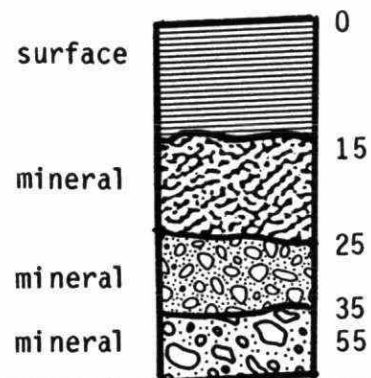
SOIL PROFILE INFORMATION (cont'd.)

Site: K & P Trail, Barryvale

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18402	surface	740	10	20		3.8	0.067	0.027	0.026	1.1	0.12	0.045	<1.0	64	21	14	23
18401	mineral	490	140	75		3.7	0.046	0.019	0.0026	0.59	0.079	0.012	<1.0	32	8.9	8.6	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Berwick Agreement Forest, Finch Date: 81/08/19



Location Code: 4001215

UTM: 18T 491500 5002250

Landform: sand plain

Slope: level

Vegetation: pine

Comments: depth to watertable 70 cm,
depth to faint mottling 50 cm,
thick pine needles litter layer,
very stoney in subsurface horizons

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18410	surface	0-15	10YR 3/1	75	8.0	17	7.0	6.4	6.0	3.6			32		<0.080
18409	surface	0-15	10YR 3/1	74	8.0	17	6.8	6.2	6.0	4.1			29		0.11
18408	mineral	15-25	10YR 4/6	90	3.0	7.0	7.3	6.6	1.0	0.50			<3.0		<0.080
18407	mineral	15-25	10YR 4/6	87	5.0	9.0	7.3	6.6	3.0	0.60			<3.0		<0.080
18406	mineral	25-35	10YR 5/6	92	2.0	6.0	7.4	6.6	1.0	0.30			<3.0		
18405	mineral	25-35	10YR 5/6	92	3.0	5.0	7.4	6.6	1.0	0.20			<3.0		
18404	mineral	35-55	7.5YR 4/2	73	13	15	7.5	6.9	1.0	0.80			<3.0		<0.080
18403	mineral	35-55	7.5YR 4/2	70	15	15	7.5	6.9	<0.50	0.80			<3.0		0.17

SOIL PROFILE INFORMATION (cont'd.)

Site: Berwick Agreement Forest, Finch

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18410	surface	2000	39	39		10	0.23	0.36	0.060	1.1	0.39	0.16	<1.0	100	13	8.0	25
18409	surface	2100	45	41		11	0.21	0.34	0.072	1.0	0.35	0.15	<1.0	110	14	8.5	18
18408	mineral	2000	8.0	12		9.9	0.13	0.14	0.0091	0.93	0.17	0.021	<1.0	44	3.7	8.0	<3.0
18407	mineral	620	10	14		3.2	0.14	0.17	0.011	1.0	0.19	0.023	<1.0	50	3.7	8.8	<3.0
18406	mineral	790	7.0	15		4.0	0.11	0.080	0.0081	0.74	0.11	0.026	<1.0	34	4.1	8.9	<3.0
18405	mineral	550	9.0	19		2.8	0.11	0.083	0.0063	0.73	0.12	0.019	<1.0	40	3.6	9.3	<3.0
18404	mineral	1400	16	30		7.2	0.22	0.13	0.014	1.2	0.19	0.068	<1.0	65	7.5	13	<3.0
18403	mineral	1800	33	47		9.4	0.20	0.14	0.017	1.3	0.20	0.082	<1.0	75	9.5	15	4.2

SOIL PROFILE INFORMATION

Horizon

Depth (cm)

Site: Riverside Heights Crown Land,
Chesterville

Date: 81/08/20

Location Code: 4001216

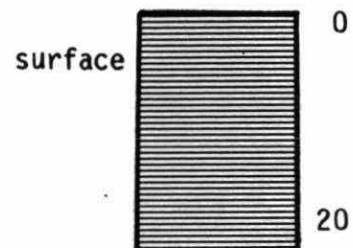
UTM: 18T 489950 4980350

Vegetation: maple, ferns

Landform: peat and muck

Slope: level

Comments: bog conditions
organic soils



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18416	surface	0-20	10YR 2/1				6.1	5.7	32	17			19		0.19
18415	surface	0-20	10YR 2/1				6.1	5.7	32	16			17		0.16

SOIL PROFILE INFORMATION (cont'd.)

Site: Riverside Heights Crown Land, Chesterville

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18416	surface	10000	390	88		55	0.18	0.067	0.017	0.32	0.076	0.023	<1.0	54	5.2	2.2	19
18415	surface	10000	430	78		55	0.18	0.067	0.017	0.31	0.071	0.022	<1.0	53	4.8	2.3	19

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Alexandria Crown Land, Alexandria

Date: 81/08/20

surface

mineral



0
15
30

Location Code: 4001217

UTM: 18T 518550 5024600

Landform: till plain/clay plain

Slope: level

Vegetation: maple, elm, grasses

Comments: depth to watertable 30 cm,
Fe mottles below 15 cm,
organic mottles at 15-30 cm

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18414	surface	0-15	10YR 2/1	33	22	45	7.7	7.3	9.0	9.1			19		<0.080
18413	surface	0-15	10YR 2/1	33	22	44	7.6	7.3	9.0	8.0			16		<0.080
18412	mineral	15-30	10YR 4/2	48	21	31	7.8	7.2	1.0	1.1			7.0		<0.080
18411	mineral	15-30	10YR 4/2	59	16	25	7.8	7.1	1.0	1.3			6.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Alexandria Crown Land, Alexandria

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18414	surface	4100	150	110		22	0.20	0.19	0.0091	0.50	0.20	0.014	3.0	390	23	10	22
18413	surface	2800	140	99		15	0.19	0.20	0.0086	0.51	0.20	0.015	3.0	380	23	10	21
18412	mineral	3500	130	60		19	0.052	0.10	0.0070	0.34	0.10	0.033		140	13	18	<3.0
18411	mineral	1800	63	37		9.5	0.068	0.12	0.0079	0.40	0.12	0.043		140	12	17	<3.0

SOIL PROFILE INFORMATION

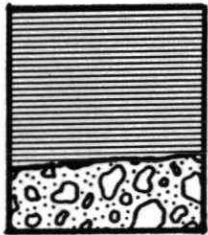
Horizon

Depth (cm)

Site: Mill of Kintail Conservation Area

Date: 81/08/14

surface



Location Code: 4001219

UTM: 18T 401150 5010800

Vegetation: beech, maple

Landform: shallow till and rock ridges

Slope: gently sloping

Comments: shallow pockets of soil

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18185	surface	0-10	10YR 3/2	55	27	18	5.3	4.5	2.0	1.7			<3.0		1.8
18377	surface	0-10	10YR 3/2	57	32	10	5.2	4.5	3.0	1.8			<3.0		2.0

SOIL PROFILE INFORMATION (cont'd.)

Site: Mill of Kintail Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18185	surface	1100	170	87	31	7.3	0.24	0.14	0.0080	0.80	0.16	0.014		44	5.6	8.4	3.7
18377	surface	1100	150	78	30	7.3	0.29	0.10	0.0073	0.81	0.16	0.014		39	4.6	8.2	4.6

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Rideau Conservation Authority
(Hornung Property)

Date: 81/08/13

Location Code: 4001220

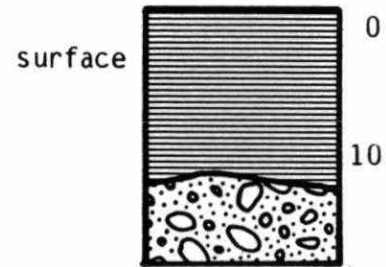
UTM: 18T 419800 4982300

Vegetation: cedars, moss

Landform: limestone plain

Slope: level

Comments: bedrock near surface



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18184	surface	0-10	10YR 2/1	81	5.0	14	6.6	6.0	5.0	1.9			<3.0		0.43
18183	surface	0-10	10YR 2/1	81	5.0	14	6.7	5.9	6.0	1.8			<3.0		0.52

SOIL PROFILE INFORMATION (cont'd.)

Site: Rideau Conservation Authority (Hornung property)

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18184	surface	390	290	69		4.5	0.11	0.095	0.070	0.49	0.15	0.13	<1.0	53	5.6	2.8	21
18183	surface	160	200	42		2.5	0.12	0.094	0.075	0.54	0.15	0.18	<1.0	59	7.0	5.3	22

SOIL PROFILE INFORMATION

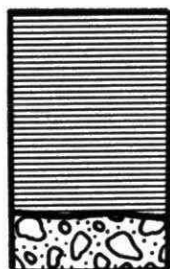
Horizon

Depth (cm)

Site: Rideau Conservation Authority,
Naftel Property
Location Code: 4001221

Date: 81/08/13

surface



0

15

UTM: 18T 439800 4967250

Vegetation: cedars, grasses

Landform: limestone plain

Comments: depth to limestone bedrock 20 cm

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18361	surface	0-15	5YR 2.5/2	50	27	23	6.5	6.0	5.0	4.0			<3.0		0.37
18360	surface	0-15	5YR 2.5/2	56	20	24	7.1	6.5	4.0	3.9			<3.0		0.36

SOIL PROFILE INFORMATION (cont'd.)

Site: Rideau Conservation Authority (Naftel Property)

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO3 (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18361	surface	2000	430	65		14	0.33	0.17	0.054	1.2	0.28	0.11	<1.0	53	11	11	22
18360	surface	1400	310	49		9.7	0.40	0.18	0.039	1.2	0.33	0.086	<1.0	56	12	11	23

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Eloida Lake, Cataraqui Conservation Authority

Date: 81/08/13

Location Code: 4001222

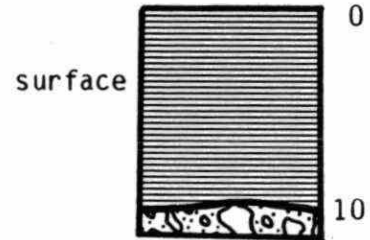
UTM: 18T 422850 4945450

Vegetation: maple, ironwood, grasses

Landform: limestone plain

Comments: depth to limestone bedrock 10 cm

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18209	surface	0-10	10YR 3/1	51	24	25	7.5	7.2	5.0	3.7					0.11
18108	surface	0-10	10YR 3/1	54	19	27	7.5	7.2	6.0	3.4					0.12

SOIL PROFILE INFORMATION (cont'd.)

Site: Eloida Lake, Cataraqui Conservation Authority

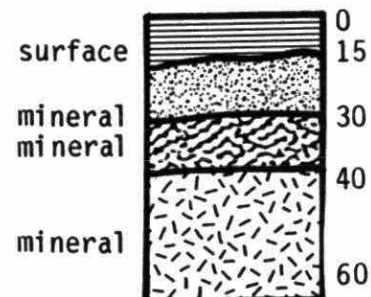
Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO3 (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18209	surface	3000	480	79		19	0.16	0.10	0.048	1.1	0.18	0.12	9.0	71	13	8.4	21
18108	surface	2000	560	56		15	0.17	0.11	0.047	1.0	0.19	0.12	7.0	62	11	7.6	16

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: Driftwood Provincial Park

Date: 81/07/31



Location Code: 4001223

UTM: 18T 280800 5199200

Vegetation: pine, ferns

Landform: sand plain

Comments: thick (7cm) pine needle litter layer

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18347	surface	0-15	10YR 3/4	83	17	<1.0	4.8	4.1	2.0	1.0			20		11
18346	surface	0-15	10YR 3/4	84	12	3.0	4.9	4.1	2.0	1.0			23		11
18345	mineral	15-30	5YR 5/8	91	7.0	2.0	5.4	4.6	1.0	0.60			24		2.9
18344	mineral	15-30	5YR 5/8	92	8.0	<1.0	5.5	4.7	1.0	0.50			20		2
18343	mineral	30-40	7.5YR 5/8	92	6.0	2.0	5.5	4.7	1.0	0.30			10		1.5
18342	mineral	30-40	7.5YR 5/8	95	4.0	1.0	5.7	4.7	1.0	0.20			8.0		1.3
18341	mineral	40-60	10YR 6/6	87	12	1.0	5.8	4.8	<0.50	0.20			<3.0		0.83
18340	mineral	40-60	10YR 6/6	92	7.0	<1.0	5.6	4.8	<0.50	0.20			4.0		1.1

SOIL PROFILE INFORMATION (cont'd.)

Site: Driftwood Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18347	surface	110	15	29	74	1.5	0.22	0.16	0.0070	0.54	0.33	0.012		30	3.2	6.2	<3.0
18346	surface	86	13	23	69	1.3	0.20	0.20	0.0076	0.65	0.36	0.014		34	3.7	7.1	<3.0
18345	mineral	64	7	14	13	0.54	0.20	0.27	0.0027	0.88	0.71	0.0069		46	4.2	10	<3.0
18344	mineral	68	7	14	10	0.53	0.14	0.21	0.0016	0.72	0.61	0.0036		46	4.2	12	<3.0
18343	mineral	34	4	12	9.0	<0.50	0.072	0.18	0.00050	0.51	0.40	0.0017		37	6.2	14	<3.0
18342	mineral	26	4	9.0	7.0	<0.50	0.060	0.14	0.00060	0.45	0.35	0.0021		31	5.7	15	<3.0
18341	mineral	34	5	21	6.0	<0.50	0.040	0.080	0.0013	0.20	0.14	0.0036	<1.0	15	8.2	12	<3.0
18340	mineral	30	6	22	4.0	<0.50	0.050	0.089	0.0016	0.22	0.15	0.0031	<1.0	14	6.6	11	<3.0

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Sager Conservation Area Date: 81/07/27

surface 0 Location Code: 4001229

mineral 17 UTM: 18T 296800 4903700 Vegetation: pine, oak, poplar, grasses

mineral 45 Landform: sand plain Comments: depth to bedrock 55 cm,
Lake Iroquois shoreline

mineral 55 Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18313	surface	0-17	10YR 3/6	90	7.0	3.0	5.1	4.3	1.0	0.50			25		4.2
18312	surface	0-17	10YR 3/6	90	7.0	3.0	5.0	4.3	1.0	0.50			25		4.6
18311	mineral	17-45	10YR 5/8	85	6.0	10	5.6	4.7	1.0	0.30			13		0.63
18310	mineral	17-45	10YR 5/8	89	6.0	5.0	5.5	4.6	1.0	0.20			19		0.65
18309	mineral	45-55	10YR 6/8	86	6.0	7.0	5.9	5.0	1.0	0.20			12		0.19
18308	mineral	45-55	10YR 6/8	89	4.0	7.0	5.9	5.0	<0.50	0.20			9.0		0.27

SOIL PROFILE INFORMATION (cont'd.)

Site: Sager Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18313	surface	64	8.0	28	31	0.76	0.11	0.21	0.021	0.71	0.25	0.064		48	4.2	6.6	7.6
18312	surface	51	6.0	24	32	0.68	0.11	0.19	0.019	0.69	0.24	0.065		45	3.7	6.5	5.0
18311	mineral	68	6.0	8.0	4.0	<0.50	0.11	0.16	0.0038	0.68	0.18	0.013		31	3.7	8.9	3.9
18310	mineral	64	6.0	8.0	4.0	<0.50	0.098	0.16	0.0026	0.69	0.20	0.012		29	3.7	6.7	<3.0
18309	mineral	85	6.0	16	4.0	0.55	0.065	0.11	0.0024	0.66	0.17	0.0098	<1.0	29	7.2	9.6	4.6
18308	mineral	64	3.0	10	<2.3	<0.50	0.056	0.10	0.0013	0.64	0.16	0.0069		27	7.2	9.5	4.0

SOIL PROFILE INFORMATION

Horizon Depth (cm)

Site: North Fredericksburg Conservation Area Date: 81/07/28

Location Code: 4001231

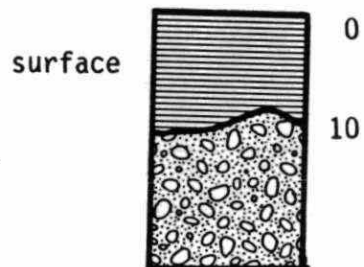
UTM: 18T 350350 4900750

Vegetation: elm, maple

Landform: limestone plain

Comments: exceedingly stoney at 15 cm,
Not sampled below 10 cm.

Slope: level



Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18315	surface	0-10	10YR 3/1	70	12	18	7.1	6.6	4.0	2.9			<3.0		0.10
18314	surface	0-10	10YR 3/1	70	11	20	7.0	6.6	7.0	3.1			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: North Fredericksburg Conservation Area

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18315	surface	3000	88	56		16	0.20	0.14	0.028	1.2	0.22	0.038	<1.0	88	9.8	15	25
18314	surface	2400	87	58		15	0.20	0.14	0.028	1.2	0.23	0.040	<1.0	94	10	16	27

SOIL PROFILE INFORMATION

Horizon Depth (cm)

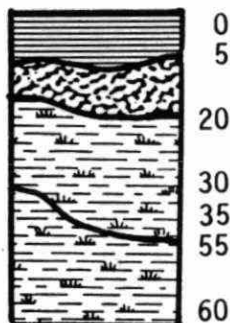
Site: Raison River Provincial Park

Date: 81/07/29

surface
surface

mineral

mineral



Location Code: 4001232

Parent Material: lacustrine clay

UTM: 18T 537800 4997250

Vegetation: hemlock, beech, ferns

Landform: clay plain

Comments: distinct mottles at 35 - 55 cm (7.5YR 6/6), and at 55 - 60 cm (5YR 5/6), some stones at 55 cm mostly shale, 0 - 5 cm not sampled

Slope: level

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18324	surface	5-20	10YR 2/2	27	53	21	4.9	4.4	3.0	7.6			44		6.9
18323	surface	5-20	10YR 2/2	23	56	21	5.1	4.5	3.0	4.8			47		6.8
18322	mineral	20-30	7.5YR 3/2	21	67	12	5.2	4.6	2.0	1.8			14		4.9
18321	mineral	20-30	7.5YR 3/2	23	68	9.0	5.5	4.7	1.0	1.1			7.0		3.1
18319	mineral	30-35	7.5YR 5/6	37	61	2.0	5.7	4.9	1.0	0.20			<3.0		1.1
18320	mineral	35-55	10YR 6/1	32	38	30	6.2	5.4	1.0	<0.10			5.0		<0.080
18318	mineral	35-55	10YR 6/1	35	35	30	6.2	5.3	<0.50	<0.10			6.0		0.12
18317	mineral	55-60	10YR 5/1	11	40	50	6.3	5.5	<0.50	0.30			5.0		<0.080
18316	mineral	55-60	10YR 5/1	12	40	48	6.3	5.4	1.0	0.40			5.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Raison River Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Metals (ug/g)			
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn		Zn	Cu	Ni	Pb
18324	surface	1000	180	160	64	8.0	0.080	0.21	<0.00050	0.12	0.21	0.00060		36	4.1	7.0	19
18323	surface	780	140	120	75	6.0	0.088	0.22	<0.00070	0.11	0.25	0.00070		38	3.2	6.4	10
18322	mineral	310	58	31	60	2.7	0.099	0.29	<0.00020	0.16	0.30	0.00090		50	1.8	8.2	<3.0
18321	mineral	250	48	11	34	2.0	0.13	0.22	0.00020	0.34	0.22	0.0010		47	1.5	10	<3.0
18319	mineral	140	39	5	<4.5	1.1	0.12	0.057	0.00060	0.54	0.092	0.0017		28	2.0	8.6	<3.0
18320	mineral	1200	410	61	<4.5	9.4	0.068	0.048	0.0016	0.53	0.062	0.016	<1.0	35	9.6	19	<3.0
18318	mineral	1300	410	59	<4.5	10	0.065	0.045	0.0013	0.54	0.065	0.017	<1.0	32	9.7	18	<3.0
18317	mineral	2500	2500	130		33	0.11	0.091	0.0051	0.60	0.10	0.023	<1.0	56	17	29	4.4
18316	mineral	2400	2500	130	<4.5	33	0.11	0.095	0.0051	0.67	0.11	0.027	<1.0	51	17	28	4.5

SOIL PROFILE INFORMATION

Horizon Depth (cm) Site: Charlottenburgh Provincial Park Date: 81/07/29

surface 0 Location Code: 4001233

mineral 20 UTM: 18T 536800 4992550 Vegetation: pine, beech, maple

mineral 35 Landform: clay plain Comments: faint mottling from 20-60 cm,

mineral 45 Slope: level some large stones throughout

mineral 60 profile

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18332	surface	0-20	10YR 3/2	28	48	25	6.2	5.6	2.0	2.7			<3.0		0.50
18331	surface	0-20	10YR 3/2	28	48	25	6.1	5.6	2.0	2.3			<3.0		0.18
18330	mineral	20-35	10YR 3/4	32	49	19	6.6	6.0	1.0	1.6			<3.0		<0.080
18329	mineral	20-35	10YR 3/4	38	40	22	6.7	6.1	1.0	1.4			<3.0		0.092
18328	mineral	35-45	2.5YR 5/4	50	35	15	7.1	6.4	<0.50	0.30			<3.0		0.97
18327	mineral	35-45	2.5YR 5/4	52	25	23	7.0	6.3	1.0	0.50			<3.0		0.23
18326	mineral	45-60	10YR 4/4	62	19	19	7.2	6.4	1.0	0.50			<3.0		<0.080
18325	mineral	45-60	10YR 4/4	63	16	20	7.1	6.4	1.0	0.50			<3.0		<0.080

SOIL PROFILE INFORMATION (cont'd.)

Site: Charlottenburgh Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18332	surface	1600	200	39		9.8	0.20	0.13	0.012	0.63	0.17	0.023	<1.0	42	6.2	11	<3.0
18331	surface	1600	180	33		9.6	0.19	0.12	0.012	0.62	0.16	0.023	<1.0	39	6.2	10	<3.3
18330	mineral	1300	140	19		7.8	0.20	0.12	0.010	0.60	0.16	0.025	<1.0	38	5.7	10	<3.0
18329	mineral	1400	160	19		8.4	0.20	0.12	0.012	0.64	0.15	0.031	<1.0	39	6.7	11	<3.0
18328	mineral	1000	140	19		6.1	0.058	0.033	0.0019	0.29	0.056	0.012	<1.0	19	3.2	9	<3.0
18327	mineral	940	190	35		6.3	0.089	0.048	0.0030	0.57	0.098	0.029	<1.0	29	8.2	15	<3.0
18326	mineral	1300	260	47		8.8	0.092	0.048	0.0030	0.69	0.11	0.035	<1.0	35	10	17	<3.0
18325	mineral	1400	250	57		9.3	0.092	0.048	0.0028	0.56	0.12	0.043	<1.0	38	12	19	<3.0

SOIL PROFILE INFORMATION

Horizon	Depth (cm)	Site: Fitzroy Provincial Park	Date: 81/07/30
surface	0	Location Code: 4001234	
mineral	17	UTM: 18T 404550 5037650	Vegetation: pine, elm, poplar, ferns
mineral	20	Landform: sand plain	Comments: Organic contamination in sampling bleached horizon at 17-20 cm.
mineral	45	Slope: moderate slopes	
mineral	60		

Sample No.	Horizon	Depth (cm)	Colour	Sand (%)	Silt (%)	Clay (%)	pH (H ₂ O)	pH (CaCl ₂)	Organic C (%)	Total Nitrogen (mg/g)	Extr. S (ug/g)	Extr. SO ₄ (ug/g)	Avail. P (ug/g)	Total P (ug/g)	Avail. Al (ug/g)
18338	surface	0-17	10YR 4/2	91	6.0	3.0	5.4	4.7	1.0	0.60			35		1.9
18337	surface	0-17	10YR 4/2	86	10	4.0	4.9	4.1	1.0	0.80			45		5.3
18339	mineral	17-20	10YR 5/1	91	5.0	4.0	4.6	3.9	1.0	0.80			45		7.8
18336	mineral	20-45	10YR 7/8	93	4.0	3.0	6.0	5.1	<0.50	0.30			19		0.34
18335	mineral	20-45	10YR 7/8	94	3.0	3.0	6.0	5.1	<0.50	0.20			19		0.43
18334	mineral	45-60	2.5Y 7/4	97	2.0	<1.0	6.1	5.3	<0.50	<0.10			10		0.25
18333	mineral	45-60	2.5Y 7/4	96	2.0	2.0	6.2	5.3	<0.50	<0.10			12		0.19

SOIL PROFILE INFORMATION (cont'd.)

Site: Fitzroy Provincial Park

Sample No.	Horizon	Exchangeable Cations (ug/g)				C.E.C. (m.e.) 100g	Pyrophosphate (%)			Dithionite (%)			CaCO ₃ (%)	Zn	Metals (ug/g)		
		Ca	Mg	K	Al		Fe	Al	Mn	Fe	Al	Mn			Cu	Ni	Pb
18338	surface	450	35	54	10	2.8	0.13	0.085	0.0046	0.35	0.11	0.0072		44	2.0	3.5	<3.0
18337	surface	300	29	53	48	2.4	0.12	0.074	0.0036	0.34	0.10	0.0062		41	1.7	3.4	<3.0
18339	mineral	230	25	74	98	2.5	0.14	0.093	0.0038	0.31	0.10	0.0043		40	2.1	4.0	<3.0
18336	mineral	130	13	26	<2.3	0.83	0.062	0.074	0.00030	0.34	0.18	0.0010	<1.0	22	3.9	7.7	<3.0
18335	mineral	100	7.0	20	3.0	0.64	0.061	0.069	0.00020	0.30	0.15	0.0010	<1.0	18	3.5	8.4	<3.0
18334	mineral	85	6.0	24	<2.3	0.54	0.021	0.030	0.00030	0.22	0.089	0.0029	<1.0	17	3.3	7.7	<3.0
18333	mineral	85	3.0	20	<2.3	0.52	0.039	0.045	0.00030	0.23	0.098	0.0019	<1.0	17	2.7	8.9	<3.0

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